

PSYCHOLOGY, RELIGION & EDUCATION

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MERRILL - PALMER

QUARTERLY

behavior and development

January 1961

Volume 7 Number 1

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The *Quarterly* is published four times yearly by The Merrill-Palmer Institute, 71 E. Ferry Avenue, Detroit 2, Michigan. Subscription rate is \$3.00 per year; single copies, \$1.00.

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MERRILL-PALMER QUARTERLY

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Behavior and Development

Volume 7, No. 1

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CONTENTS

	Page
DEFENSES AGAINST "DEPRESSIVE ANXIETY" IN GROUPS: THE CASE OF THE ABSENT LEADER	
<i>Warren G. Bennis</i>	3
FAMILY MEMBER PERCEPTIONS OF PARENT ROLE PERFORMANCE	
<i>Patricia Henderson Maxwell, Ruth Connor, and James Walters</i>	31
CHANGES IN SONG LYRICS AND SOME SPECULATIONS ON NATIONAL CHARACTER	
<i>Alvin Scodel</i>	39
HOMEOSTASIS, NEED REDUCTION, AND MOTIVATION	
<i>Ross Stagner</i>	49

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DEFENSES AGAINST "DEPRESSIVE ANXIETY" IN GROUPS: THE CASE OF THE ABSENT LEADER*

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It has often been noted that groups—particularly those which have as their major purpose therapy or self-study¹—utilize a variety of mechanisms for warding off anxieties. To the group observer or leader these defensive maneuvers the group constructs appear as a set of fictions and myths, collectively shared, which tend to deflect the group members from experiencing threatening anxieties (22). I intend in this paper to explore the mechanisms of secondary identification—chiefly "projective identification" (12, 15)—as they serve defensive—anxiety-reducing—needs, and to propose tentatively some hypotheses relating generally to defense mechanisms in groups.

Under consideration here will be a group, meeting together for a period of fifty weeks with the avowed purpose of learning "group dynamics" by using their own group as the focus of study. Due to a variety of circumstances, the group leader had to be absent for four of the first eleven meetings and on two other occasions later in the group experience. I will attempt to illustrate how the group coped with this loss in terms of specific defenses employed.²

* This is part of a larger study sponsored by the National Institute of Mental Health. Senior investigators of this project are Elvin Semrad, M.D., and Eugene Cogan, Ph.D. Acknowledgments are due to the aforementioned for some of the formulations, and particularly to Eugene Cogan, Ted M. Mills, Philip Slater, Herbert Shepard, Edith Varon, and Howard Perlmuter for critical readings and suggestions.

¹ Jaques points out that this phenomenon exists in more formally structured groups as well (12).

² Implied in this approach and throughout the paper is the contention that the group provides a useful crucible and analogue for understanding intrapsychic processes and that concepts applicable to the person unit may equally apply to the group unit (16, 19, 23). Kelley and Thibaut point out: "Thus, whereas some authors (e.g. Dashiell) suggest using individual problem solving as a model for analyzing group process, Bales suggests the opposite—that group process be used as a model for individual thought process. Undoubtedly both views have merit" (13, p. 738).

THE GROUP SETTING

Nineteen psychiatrists, all first- or second-year residents from two hospitals, participated in the group experience for an hour and a half each week for fifty weeks. The major goal for the group, made explicit by the leader, was to arrive at an understanding of group dynamics through participation in a group which would attempt to understand its own processes. The group leader was a psychoanalyst, clinical director of a well-known psychiatric hospital and well acknowledged for his experience and success in conducting groups of this sort (21). His orientation (the observations and interpretations he made) was guided by psychoanalytic theory although primarily based on the "here and now" interaction rather than genetic factors. The group leader's particular style lent itself very neatly to formulations concerning depressive anxiety since one of his major roles was that of a leader, who, in his words, "deprives and refuses." The behavioral consequences of his formulations took the following forms: (a) he spoke only infrequently during the group meetings—typically under five interventions per meeting, and those only a sentence or two; (b) he provided minimum and ambiguous structure; (c) he did not reward and occasionally punished by reminding the group of their responsibilities (summaries and papers were assigned); (d) his remarks were geared to the shared and unconscious fantasies of group members and were thereby frequently ambiguous and readily misunderstood. In addition to the anxiety which the leader evoked, the fact that the residents were relative strangers to each other and were just beginning their responsible positions with the concomitant threat of impressing their peers, all fed into heightening their anxieties. Finally, the group leader himself was viewed by some as a "realistic authority figure" since it was felt that his judgment might ultimately influence their professional careers.

The group meetings took place at a hospital in a comfortable room where the residents could be seated around a table with the leader at the head. Seated around the periphery of the room and behind the table each week were a number of observers (three or four psychologists who made up the research group) and a female secretary who took complete notes, noted arrival and departure times, seating arrangements, and all material which the tape recorder could not accurately pick up. All the meetings were electronically recorded, typed onto hectograph sheets, and then duplicated. The protocols and tape recordings, which were discussed each week by the leader and the research group, provide the data for this paper.

In this group, a fortuitous factor occurred during the early part of the group life, creating antecedent conditions where the study of depressive anxiety could be undertaken.³ The leader was absent for four of the

³ Other students of group behavior have examined similar phenomena using different theoretical constructions (5, 10, 17).

first eleven meetings. The protocols reflected the potent effects of his absence: the pervasive themes were absence or silence (of group members or leader), loss, and responsibility to the group. A content analysis of the first twelve meetings reveals that between 60 and 70 per cent of the material centered around these issues. From data collected in another part of the study, we know that the group leader, over time, was idealized by the group members, that he was seen as omnipotent, that he represented the group's ego ideal.⁴ How could this leader who, when present, refused and deprived, who structured a situation which inevitably led to anxiety, who was absent for so many of the early meetings, emerge so idealized, so well respected and loved? In an attempt to obtain more understanding of this question, we turned to defenses against depressive anxiety.

In order to dramatize the potent effects of the leader's absence and to provide the reader with some inkling of the major preoccupation of the group during this bereavement period, I will summarize and quote briefly from one meeting. (Further elaboration follows; what is of moment here is an example which distills the group's dominant tone.)

During the tenth meeting when the group leader was present (he had been previously absent three times), the group began with a discussion of Yom Kippur, the Day of Atonement. One of the group members had read Abraham's article on "Kol Nidre" and opened the meeting with his own puzzlement over the meaning of the prayer:

X: [Abraham] spent a great deal of time trying to interpret "Kol Nidre" with reference to the Oedipal situation and with reference to the rejection of the father figure by the brothers. Have any of you who are Jewish here heard any discussion of the "Kol Nidre?" (Pause) It's quite a paradoxical prayer.

Y: It's very interesting that you should mention the rejection of a father by the brothers; that's pretty much the theme that I made out of last week's meeting.

Later on in this meeting there was a lengthy discussion about whether the leader was a member of the group or not. One member of the group visualized the group as an "organism, an individual and a rather immature individual because it's less than three months old." He also visualized the leader as "something outside the group." This fantasy accurately reflects the helpless condition of the group in the face of the leader's impending absence and past absences. The leader's interpretations, which follow below, provide the most graphic illustration of the group's problem: the loss of the leader. (These comments were spaced over the entire length of the meeting.)

Are you saying that every part of our body has a job to do?

Are you implying that when a member isn't here somebody else has to do his work?

⁴ "Inspecting the data shows a systematic increase over time in the tendency for group members to select the Leader as ego-ideal" (4, p. 3).

You mean on a gun team, if the ammunition bearer is not there, it continues to function?

I was going to ask the neurologists if a man can function without one prefrontal gyrus.

Is it true that phantom limb cases don't actually believe they've lost the part? Perhaps you can title this meeting "The Whole Clamors for Its Parts."

The above remarks were made by the leader at meeting 10 to prepare the group for his impending absence the following week as well as to direct the members to work on their feelings of loss already experienced.⁵ How the group handled this loss, the vicissitudes of emotions and defenses employed in response to depressive anxiety, will be considered after a closer look at the background of the absences and the group's reaction to them.

THE ABSENCES

The leader announced at the first meeting that he would have to be away during certain weeks. (The group began the middle of July and the leader's absence was due to the customary August vacation.) He mentioned four dates when he would be away and it was up to the group to decide whether they wanted to meet or not. Table 1 shows leader absence (LA) during the first sixteen meetings. Over the span of fifty meetings there were six LA meetings. Of these six LA meetings, one—meeting 7—was unanticipated by the entire group due to a misunderstanding; another—meeting 15—was anticipated by the residents of one hospital, but due to faulty communications, residents of the other were not notified. After the fifteenth meeting there were no other LA meetings until meeting 34. Member absences averaged about 6 per meeting, with a range from 2-8 after the sixteenth meeting. Major attention in this paper will be focused on the first twelve meetings as it was during this period that the leader's absence had its most severe effects due to the embryonic state of the group. (Later on I will discuss briefly meeting 34 [LA], but only as a device for comparison with the earlier LA sessions.)

DIFFERENCES BETWEEN LA AND LP MEETINGS

If we examine an LA session and the LP session immediately following it, we discover some interesting patterns. (Thus, for present purposes, meetings 4 and 5, meetings 6 and 8, and meetings 11 and 12. Meeting 7

⁵ Edith Varon has raised the question of whether in fact the leader's interpretations (a particularly high number for him) did not evoke the depressive anxiety, a kind of "self-fulfilling prophecy." As will later become clearer, the leader was interpreting the latent meaning of the phenotypic behavior; he was not inducing anxiety, simply interpreting it. Subsequent material from the protocols, which will be presented, argues plausibly for this reasoning.

was excluded from this analysis because, while the leader was absent, he was, in fact, expected to be present.)

First of all, at the three LA meetings under consideration, there was a consistently higher rate of absenteeism: only 5 out of 18 members were present during meeting 6; 8 were present at meeting 11. (One member later joined the group, giving it 19 members at full component.)

TABLE 1
LEADER AND MEMBER ABSENCES

Meeting	Members Absent	Leader Absent
1	0	P
2	1	P
3	6	P
4	9	A
5	6	P
6	13	A
7	3	A
8	5	P
9	2	P
10	8	P
11	10	A
12	1	P
13	5	P
14	6	P
15	11	A
16	6	P

Note.—The group did not meet for 2 weeks between the 6th and 7th meetings. On the 7th meeting the group expected—through a misunderstanding—an LP meeting, but the leader was absent. Three of the 9 members who were present at meeting 4 were not present at meeting 8 and expected an LP meeting. At meeting 11 only 2 members who were present knew that it was an LA meeting; the others expected an LP meeting.

Another factor which seems to discriminate between these LA and LP meetings was that the former in all cases lasted longer, and with greater activity and interaction. The average number of typed pages per LA meeting was 43; per LP meeting, 23. This may have been due to the fact that the leader's absence created uncertainty as to when the meeting precisely began and when it ended. Usually the members would start only after ten or fifteen minutes of kidding, joking, informal side-chatter, etc., and would stop when the tape recorder had used all its tape. (The observers and tape recorder were present at all meetings.)

Group affectivity, also, showed remarkable contrasts between these LA and LP meetings. There was a greater release of positive feelings to-

ward group members during the LA sessions. One of the group members said during meeting 12:

. . . but it seems to me that, that last meeting was the first time anyone had said anything nice about anyone else, and I just wondered whether we shy away from that sort of thing more intently than we do against expressing negative feelings.

The post-meeting responses collected during the course of the study reflected the positive affect manifested during the LA meetings in comparison to the LP meetings (3).⁶ A good part of the LP meetings was spent in discussing how meaningful, important, pleasant, cohesive, and friendly the LA meetings had been. When the members were asked by those who had been absent during the LA meeting what accounted for this climate, they attributed it to the smaller size of the group or to the illuminating topics under discussion. Little mention was made of the leader's absence except for its intellectual connections. (Two members claimed they might try LA sessions with the groups they were leading.)

Another difference between these LA and LP meetings, perhaps the most important, concerns the introduction of unconscious material in the form of dreams. Only two times during the first twelve meetings was dream material brought into the group; in both cases, during LA meetings. This will be discussed in detail below.

One final contrast between these LA and LP meetings will be mentioned although this does not exhaust the differences observed. It was found that there existed in all cases a more pervasive element of depression in the LP meetings. This was manifested in the longer periods of silence and statements expressing the depression. Let us now turn directly to the specific defenses.

DEFENSES AGAINST DEPRESSIVE ANXIETY

In *Group Psychology and the Analysis of the Ego* (7), Freud took as his starting point the relationship between the group and its leader. The essence of this relationship was described in terms of mechanisms of identification: between group members and leader and among group members. Freud did not explicitly develop the concept of identification beyond that of identification through introjection, although it is clear that where

⁶ Post-meeting responses were factor analyzed into two pure factors: identification with the leader and member cathectic. This last factor consists of variable descriptions: (a) Satisfaction with the meeting, .65 factor loading; (b) Relaxation, .58; (c) Lack of anger, .43; and (d) Warm and friendly feelings, .83. Group cathectic scores for meetings 4 and 11 (LA meetings) were higher—in the positive affect direction—than any other meetings up through meeting 12. (The group cathectic score for meeting 11 was 50; for meeting 12 (LP), 37; almost 1.5 standard deviation difference.)

he differentiated between the Army and the Church, his discussion foreshadowed the mechanism of projective identification. In the first case, the soldier replaces his ego ideal by the leader who becomes his ideal; in the second case, the Christian takes Christ into himself as his ideal and identifies himself with Him. The recent movie, "Bridge on the River Kwai," offers an excellent example of the former mechanism: the troops replace their ego ideals with the brave Colonel Nickerson, thus gaining a binding cohesion. The communion ceremony represents the latter case, identification through introjection. Melanie Klein (15) and her associates have called the former process identification through projection.

In short, projective identification is a secondary or defensive mechanism which utilizes some external object in order to relieve certain internal anxieties—in this specific instance, anxiety over a lost object. Identification by projection implies both splitting off parts of the self and projecting them into another person or object. Klein goes on to elaborate the mechanism of projective identification into defenses against paranoid anxiety, which put bad objects and impulses into particular members, and defenses against depressive anxiety, which tend simultaneously to split off the good from the bad objects and to heap resentment on the bad and idealize the good. According to Klein: "When the depressive position arises, the ego is forced (in addition to earlier defences) to develop methods of defence which are essentially directed against the 'pining' for the loved object. These are fundamental to the whole ego-organization" (14, p. 316).

Let us now turn directly to the assortment of defenses utilized by the group under study, attempting to apply Klein's formulations for the individual to the group process whenever appropriate. Four mechanisms will be presented: (a) *fantasy projection*, where masked symbols are utilized to dissipate energy away from the actual source of anxiety; (b) *manic denial and idealization*, where the source of anxiety is denied and good impulses are projected into other objects; (c) *scapegoating*, where the bad impulses are absorbed by other objects; and (d) *restitution of the lost object: peer group replacement*, where impulses concerning the absent leader are projected onto an appropriate group member. These four defenses are not empirically independent from one another or mutually exclusive; however, for analytic purposes, they will be discussed separately. After a brief illustration of these four defenses against depressive anxiety as they occurred in the group, meeting 34 will be discussed in order to illustrate a nondefensive form of identification with the leader.

Defense through Fantasy

Perhaps the most economical device to relieve depressive anxiety is dream material. We know that dreams provide the instrument whereby primitive elements may be analyzed. This group took no chances that

painstaking dream-work could be done: dreams were brought into the group meeting on two occasions and only when the leader was absent; both dreams, as we shall see, were centrally involved with feelings toward the leader. The importance of the dreams could be gauged by the amount of time spent discussing them. In both cases, the narrative of the dream and the subsequent associations dominated the bulk of the meeting, taking well over half of the time.

In meeting 6, the group discussion was auspiciously started by an individual who said that he awoke that morning with a heavy depression and almost did not come to the group meeting. This same individual, the week before, had been attacked when he said that he did not particularly want to come to the LA meeting the following week because his assumption was that if the leader was going to be absent, the meeting would not be held. In meeting 6, he related his depression to the leader's absence:

So there I was feeling tired, sort of a depressive thing . . . and the two thoughts that came after that were: first, depression means object loss usually, on an intellectual level; and the next thought was "Dr. — isn't here this week," so I kind of assumed that what I felt was a depression because of a transference phenomenon—that this was a sort of an object loss, in a sense.

We will return to this statement later in the discussion of *manic denial* but for the moment we can say that this remark was deflected by the four other members of the group. (Only five members were present at this meeting.) It did, however, precede and to some extent precipitate the introduction of a dream by a member who had been completely quiet the week before—a dream which was clearly related to the absent and deserting leader.

At the beginning of the meeting, in fact before the group formally opened, there was a brief discussion about vacations. The resident who eventually introduced the dream material was bemoaning the fact that he had only two or three days of vacation time available to him. He then mentioned laughingly "going to Miami Beach for the winter." Another resident responded, "What a dreamer," to which the resident who produced the dream responded, "Well, you can dream." (The group leader was on vacation during this period of protracted absences.)

After about a third of the meeting had elapsed, the same resident turned to the resident who earlier had discussed his depressed feelings over the leader's absence and said:

You know when you were talking before, something came to my mind and I just couldn't help smiling. It's, ah, I don't know why a dream that I had last night came to my mind, it was about groups. I don't know why. I'll just throw it out here, but no, ah, there was this one patient and, ah, I may be letting myself wide open I don't know.

This patient was doing poorly; in other words, his defenses sort of crumbling, you know. We felt that we were treating him, not as a group, but a few people, and we felt that he shouldn't be pressed, because we might really produce a complete break so we decided that maybe the thing to do was to give him a little inspirational group therapy and then somebody brought a record and in this record was Billy Graham recording one of his meetings. Then there was the patient and two other men and one girl and they all held hands and started playing the Billy Graham record. When the record started there was a background of rock and roll music and then this group of the patient and then the other two men and the girl, they got up and started doing a rock and roll—that was the inspirational group.

That this dream appears to be related to the group's problem of dealing with a deserting leader is highly plausible both in terms of the dream content as well as the group's ultimate associations to the dream. The "patient doing poorly" seems to represent the "sick group" with only five members present. The "rock and roll" music was associated to by several members when they claimed that rock and roll had been mentioned by some group members the week before. They tried to remember the context and could not, but did remember who had introduced the phrase.

(Upon reading over the previous week's protocol it became apparent that rock and roll had some relationship to the group, most probably its leader. During a skittish part of that meeting the group talked about "a sort of spontaneous fountain that will bring forth and all we have to do is sit and drink."

I think you are referring to the rock pile.

I think the "rock pile" is interesting since rocks were the original god figures when people used to worship gods all the time.

This is too deep.

Rock of Ages, Rock of my Fathers.

Rock and roll.

These statements were made by different group members. Thus, it would appear that rocks [fathers] may very well be connected with the leader.)

Following the narration of the dream, there was a temporary struggle about how to deal with the dream. One group member felt that it was not "appropriate" for the group, but if it were, it should be related to the hospital where they were experimenting with "administration through team relationships." The other group member, who felt it was not appropriate, tried to suppress the analysis of the dream in terms of its relationship to the group by a number of means:

1. *Claimed it was not appropriate:* (To the producer of the dream) "Why did you bring this up? It seems to me maybe it's not appropriate for us to talk about the content of the dream."

2. *Prematurely and hurriedly analyzed the dream:* "Unless you're different from other residents, I might speculate that maybe we're all sort of having a problem with closeness and relations with groups and relations with patients and that certainly we all, I'm sure, feel this way, and it seems to me that's what the dream's about."

3. *Displaced dream from group to outside, safer symbol:* "I think your dream may well have been related to this approach [team administration] rather than to this group here or groups."

This last statement launched a long discussion on teamwork in hospitals with particular reference to supervision. I have remarked elsewhere that "when the content of a discussion deals with organizational relationships of a hierarchical nature, it typically relates to the leader problem in the group" (1). In this case the residents spent the rest of the group meeting discussing their supervisors, generally in negative terms. Their supervisors were authoritarian, "have an unlimited number of votes" (said with a sad laugh); or "he interjects his personality, and then he pulls it out, puts it in, and then he pulls it out, and sometimes when you think that you're running the thing, he'll step in and take over, and then again, when you're looking for him, he's not there, he'll sit back . . ." This last statement is a perfect description of the group leader as the members see him: he's in and out, when you want his help he's not there, he's ultimately powerful, etc.

Later on in the meeting the same supervisor was referred to as "writing orders on my patients and changing them" and "not only is he on vacation, but he isn't coming back." (This was met with great laughter.) Later it was stated that this supervisor "was inaccessible today as he was in Rome."

Now it is fairly clear that this dream, a direct derivative of the group situation, was transformed into an object external to the group (team relationships and the supervisor) and this transformation tended to alleviate the depressive feelings aroused by the loss of the leader. In fact, we can see that every attempt to relate material from the meeting to the group leader was quickly sabotaged. Note how this happened when the person who initiated the meeting on the theme of the loss of the leader was quickly squelched; also, how the dream was at first avoided and later projected onto a safer object.

Dreams, which were brought in during two LA meetings (and only then), we propose, were used to externalize grief and suffering in two ways: by dissipating energy tied up with the displaced object and by exploiting, at a remote level, dream symbols which are masked derivatives and reminders of the more primitive elements of the group processes.

Manic Denial and Idealization⁷

Among the most common defenses against anxiety is denial. When we observe a denial pattern which is shared by the group and perpetuated to a degree that is unrealistic, we have some reason to wonder about the source of anxiety. For an example of manic denial, as it occurred in this particular group, let us look back at the same meeting referred to above (meeting 6). Recall the opening of the meeting when one group member related his depression to the leader's absence. What followed his opening remarks could be seen as a pattern of attempts to ignore the content, even though it is reasonable to assume that it would be natural for the members to have some negative feelings toward a leader who was absent. Some of the following remarks are examples of manic denial:

It seems to me that we don't know Dr. —— well enough, we haven't had enough—at least from my hospital, we haven't had enough—in connection with him to feel any loss.

As for him leaving, I had no conscious anger or anything whatsoever; as a matter of fact, I said, "The guy's going on vacation probably." I don't know, I assumed he was.

After this followed a discussion on vacations which seemed to serve the group's need to escape from the topic of the leader's absence as well as validate the possibility that the leader himself was really on vacation. However, the depressed individual again related his "tiredness" to the absent leader. This was met by a statement which argued—on intellectual grounds—for the legitimacy of denial.

Well, I've had fellows say to me, "Well, you've done this because you've had some sort of relationship with your father." I don't think that we really can deduce anything like that here, nor is that even a valid thing to try to get to here, but we can, I personally feel that we can, arrive at a more clear picture perhaps of why we, as individuals, act as we do. Or *how* we act, rather; how we, as individuals, act, not *why*, but *how* we act.

Not being deterred by this remark, the depressed individual persevered on his "lost" feeling and then related how his own father died when he was an infant. That this statement corresponds so closely to the group's own problem—the group leader "dies" during the infancy of the group

⁷ "Another way in which depressive anxiety may be alleviated by social mechanisms is through manic denial of destructive impulses, and destroyed good objects, and the reinforcement of good impulses and good objects, by participation in group idealization. These social mechanisms are the reflection in the group of denial and idealization shown by Melanie Klein to be important mechanisms of defense against depressive anxiety" (12, p. 486; 14).

life—may explain why it was immediately brushed aside by other group members:

I wonder if you really can work that sort of thing out here.

You don't seem that depressed to me, actually.

Following this discussion, the group wandered off into a discussion of group goals: what was expected of them, what they expected. Shortly after this, the group dealt with the dream discussed above and proceeded to have an enjoyable, active meeting on psychiatric administration and the foibles of authority figures.

The following week (meeting 7) the leader was expected back (due to faulty communication) but did not appear. At this time, the five members who had been present at the previous LA meeting proceeded to celebrate it with long testimonials about how rewarding and stimulating it had been. Not only was the meeting considered gratifying, but some felt it was improved because the leader was absent:

A: The impression I have is that the leader was a necessary, is a necessary, was necessary to the group interaction in the early stages, to promote the kind of thing we were here for. Now I may be wrong, that would be the impression I have from what you said, and yet, on the basis of our meeting here, I don't think we would have done as well with the leader present.

B (who had not been present at the previous meeting and had been for the most part silent): But he is present.

A: I was just, that was my impression.

C: He wasn't present.

B: He is now.

B, who was apparently attempting to get the group to examine the impact of the leader's absence-presence (10), was ignored with silence. Someone then asked A if he thought the group did in fact require a leader. A did not answer directly.

Later in the group meeting, a fairly silent member who up to that time had not spoken intervened with a good deal of emotion in his voice and told the group:

I don't know, but my own feeling is that there is only one person here who is expressing real feelings. That's you [referring to the depressed individual]; I don't believe anybody else aside from him expresses feelings sincerely. He is the only one who is crying.

This was followed by laughter and then an attempt to smother this threatening material by indicating to the speaker that one can express feeling without crying. Immediately following this, the speaker who had attacked the group for not crying said that he did not think it was possible for him to attend the group meetings because he had no car, and that he was not sure, if he had a car, that he wanted to attend. The group then

responded to him by attempts to arrange transportation for him. Then he said, "I will come if they come [referred to a ride]. Or if you plan, as Sam said, for Dr. —— [the leader] to send his car." This was received by spontaneous laughter from the group. The humor here contains a hollow gallows quality, in effect saying: "We cannot even get our leader here. Can you imagine his sending his car to pick us up?"

Meeting 8, which followed an unexpected LA meeting, stayed mainly on the topic of "how wonderful" meeting 6 had been, with an acceleration of testimonials.

I think we can see from these few examples that manic denial is always accompanied by idealization of some other object. Early in the group life—and particularly in this group where the leader was so frequently absent—idealization would probably focus on objects apart from the leader. This suspension of object choice would lead to the hypothesis that the initial forms of projective identification (manic denial) would use a variety of other objects until the group members became ready to substitute the leader's ego ideal for their own. Examination of the group protocols up through meeting 12 indicates that one of the chief interpersonal tensions existing in the early life of the group was the imbalance and asymmetry of members' willingness to share in the same object. It's as if the group members were saying to one another: "Let us advance to this object equitably and simultaneously. Anyone who seriously seems to be setting up his own private identification with the leader will be hurt."⁸

We can observe the mechanism of manic denial and idealization during the fourth meeting, the first time the leader was absent. The members were expressing some concern about the apparent goallessness of the group when one member said:

Well, perhaps it's like neuroanatomy, I was confused up until the final, and then all the tracks and sections appear at different levels, and sort of fit into a whole, just for the period of examination—and then it fell apart. . . . Well, perhaps at the end, the last session, we'll sort of look upon this as sort of a contiguous whole, as we walk out.

Following this comment, the group members enshrined a number of people, "all greats in psychiatry," as a source for structuring the rest of the group meetings. There was frequent allusion to individuals they had worked for and lecturers in psychiatry and past supervisors, all of whom had been excellent and instructive.

⁸ Those members of the group who were initially attacked consisted of two members who had been in the leader's previous group for the last half of the meetings and who had had some previous identification with the leader and his group, and who indicated their positive feelings to the leader. The other scapegoated member was very vocal in announcing his strong allegiance to the leader. (He announced, for example, that he did not think the group should or would meet without the leader present.)

It appears then that one mechanism for dealing with depressive anxiety is a parallel device: manic denial of the loss accompanied by idealization of other objects. These objects may be the group itself, "greats in psychiatry," other members of the group, and ultimately, the group leader. (It should be mentioned that the idealization may have occurred in this group despite the leader's absences and the production of depressive anxiety. The causal connection cannot be clearly documented here for, in fact, as was mentioned earlier, the leader can, indeed, be considered a "great" in psychiatry —certainly in the Boston area where his reputation as a very prestigeful figure is taken for granted.)

Hostility, Scapegoating, and Paranoia

One of the more common phenomena observed in group and organizational life is scapegoating, usually thought to be misdirected or inappropriate hostility. Scapegoating can be thought of as a special case of defense against depressive anxiety. As Jaques points out, "The primary defense mechanism against the onset of depressive anxiety was that of retreat to the paranoid position" (12, p. 492).

The interesting aspect of scapegoating and hostile behavior is that it exists concurrently with the idealization phenomenon. In fact, we can say that idealization and scapegoating proceed *pari passu*: that as the need to project good impulses increases, an equal and opposite need exists to project into external objects bad impulses and wishes. What is more interesting perhaps than the acknowledged fact of scapegoating is the question of the particular objects selected as targets for attack. These objects, I propose, are not random. What appears to be the case, instead, is a quiet collusion between the attacked and attacker; a shared unconscious phantasy which permits the attacked to drain off the guilt associated with loss (in the particular instance of depressive anxiety) and which provides the attacker with a "legitimate" channel for expressing his anger at the lost object. We see at the unconscious level, then, a group cooperating in setting up the guilty party (who in some magical way created the loss) and the plaintiff who feels wronged (deserted in this case).

A striking example of this can be seen in meeting 11 (LA) when a group member attacked the group recorder (who was reporting a five-minute summary of the previous meeting) for allegedly attacking another member of the group who was not present. Actually, the recorder's remarks indicated precisely the opposite: that the group member in question was an important and "good" group member. Then the group attacked the protector of the alleged attacked one for a long period. It appeared that the "protector" attacked (quite unrealistically) the observer for criticizing an innocent victim, thus, in turn, reaping the group's hostility.

The incidence of scapegoating and paranoiac behaviors was so ubiquitous in the group that a number of hypotheses about object choice of the scapegoat can be made concerning depressive anxiety.

1. Those individuals who will be selected as scapegoats will tend to be individuals who attempt to set up an identification with the leader *before* the main portion of the group is ready. This will occur during the early stage of group life.

2. Those individuals who will be selected as scapegoats will be those individuals who resist an identification with the leader *after* the main body of the group has replaced him for their own ego ideal. This will occur late in the group life.⁹

3. Those individuals who will be selected as scapegoats will tend to be individuals who have had in their own development some guilt associated with a lost significant figure. They will evoke hostility as a way of draining off guilt associated with an earlier loss; a loss for which they feel in some degree responsible. (In this group, the two members who were attacked regularly reminded the group of the fact that the group leader was absent and/or they were angry or depressed by his absence. In both cases, the fathers of these two men died during their childhood.¹⁰

Restitution of the Lost Object: Peer Group Replacement

Two theoretical considerations will provide the necessary structure for the analysis of this defense—perhaps the most complicated, from a dynamic point of view.

First, Rochlin has proposed that in most cases, following an emotional trauma due to an important lost object, the individual creates some sort of unique restitution of the lost object (18); the derivative transformations of the original lost object vary considerably from other persons to inanimate objects which symbolically represent the lost object.

Secondly, let us consider Freud's discussion of the myth of the primal horde: "These many individuals eventually banded themselves together, killed [the father], and cut him in pieces. . . . They then formed the totemistic community of brothers all with equal rights and united by the totem prohibitions which were to preserve and to expiate the memory of the murder" (7, p. 112). The horde's act, according to Freud, was soon distorted into a heroic myth: instead of murder by the group, the myth held that the father had been overthrown singlehandedly by one person. In this attribution of the group act to one individual (the hero) Freud saw the "emergence of the individual from group psychology." His defini-

⁹ Further research is being conducted on this problem: W. G. Bennis and R. Burke, *Leadership and Identification in Small Groups*—in preparation.

¹⁰ "In other words, a central problem involves the way in which the presence of children influences adult functioning, especially in relation to the adult's own unresolved problems from childhood" (11, p. 113). In this paper the authors establish a connection between the onset of mental illness and certain anniversary (death) dates. In this connection, the loss of the leader in the group under study represented the trigger, it appears, for early traumatic events to reassert their way to consciousness; a type of anniversary event without reference to specific times.

tion of the hero is ". . . a man who stands up manfully against his father and in the end victoriously overthrows him" (8, p. 9).

The unique restitution of the lost object coupled with the unconscious wish to overthrow the (father) leader and displace him with one of the (brothers) group members can now be put in terms of our conceptual framework. One way of handling anxiety concerning loss of significant group members—in this case, the leader—is to elevate a group member, as a replacement, into this position. In other words, *group members projectively identify with another group member by projecting onto him their own rebellious impulses as well as utilizing the replacement to mask the loss of the absent leader.*

How this replacement emerges and on what grounds a particular group member is selected as the replacement (Freud attributed this to the youngest son) can only be partly illustrated by the data presented below. Much more research remains to be done before any definitive statements can be made. However, our tentative speculation is that an unconscious collusion between the replacement leader and other group members eventuates in which characteristics of the replacement resemble those characteristics of the lost leader about which group members feel most ambivalent. We will turn to the protocols presently in order to illustrate this defense, but for the moment, let us examine some of the conditions under which this defense may or may not be manifested.

In the group under discussion, a number of conditions mitigated against a total replacement of the leader and a strong identification with a peer replacement. In the first place, the group had not met a sufficient period of time for the "heir apparents" or "contenders" to emerge (20). Moreover, with the unstable and inchoate nature of the group in its early stage, it is doubtful whether group members would invest one of their peers with differential power. This is particularly true in light of the suggestions made above concerning the equilibration of distance toward the leader. And, most important, no matter what the fantasies of the group members, the leader was not permanently lost; he would return.

Despite these forces, other forces were also operating in the group to create a *pro tem.* leader. Examples which will be presented below show that the group tried valiantly to replace the lost leader. And this occurred most openly during LA meetings and always collapsed at the following LP meeting. The elevation of the surrogate leader was always accompanied by a manic cohesiveness which was short-lived (2),¹¹ most probably due to apprehension about the returning leader as well as jealousy stirred up by the bestowal of power on a peer. As suggested above, characteristics of the replacement in this case resembled, or were perceived as resembling, characteristics of the absent leader: i.e., the replacement was

¹¹ Supporting evidence may also be found in Philip Slater's "Totemic Process in Groups" (unpublished manuscript, 1960).

quiet, thoughtful, controlled, psychoanalytically oriented, and neutral. As we shall see, this defensive reaction was only partially successful.

A few excerpts from LA meeting 11 followed by LP meeting 12 will illustrate the role of the replacement leader and group members' attitudes towards him.

LA Meeting 11

A (replacement leader): You, you, you're always coming back to the leader again, the importance of the leader; now I grant that this is very important and, ah, I miss his presence, I think, not as much as anybody else but I miss it. But I think there's also an interaction among members which is, is just as important, ah, and, ah, B said that he had come in today to be the center of the stage, more or less, to be the Romeo [allusion to a reported dream].

A (later on): To some extent to bring the feelings which you brought in, ah, which arise in connection with, ah, feelings toward other members and toward the leader as well, which, ah, I would think that the leader's absence, as you say, promotes, ah (pause). But I, I don't think it's as bad as you think it is. It seems that we can see two camps: one, the type, ah, whose interests are identified mainly with the activities of the leader and centered about the leader, how the leader affects the group, and how the group as a whole responds to the leader—which you represent, C. B and D represent the opposite extreme that they're individuals and they're going to fight for their rights and they're going to express what they feel, and they're not going to lose their identification in any way. I think, I myself tend to fall in that category, but I know, I know better, ah (laughs), ah, that I haven't gone to the opposite extreme yet.

C: You know, A, as far as I'm concerned, your comment, there's more to it than that because at the earliest meetings, I recall that I came to the group with all sorts of emotional feelings and, ah, and, ah, expressed them; and then I've, ah, noticed that you, you, you've, ah, tended to be very controlled in the meeting and I've told you this, ah, a couple of times, and it's, ah, an admirable thing, I think.

C (to A, later on): No, the point is that I'm identifying with you.

B: Because you think his control is admirable, you mean?

C: Yeah, because I have the feeling that, ah, A usually understands what's going on at the meeting.

(*Pause*)

B: And he only speaks at appropriate times, and says worthwhile things.

E: In other words, ah, ah, A is a better father figure for you.

B: A better psychiatrist.

(*Pause*)

E: Well, that's a father figure.

B: It's also ego ideal in this group.

E: Yeah, that's what I mean, I mean, his [C's] ego ideal is more incorporated in A than it is in any of the other members in the group.

B: Well, A probably comes the closest to doing that, of anybody.

E: So that is the way he allays his anxiety when, in the leader's absence, he uses A for his ego ideal. This is the way he controls his anxiety. Maybe that's why he said what he said.

D: Ah, ah, you know, I, I, I missed this point, I think, completely. What, what is it again? B, what's the point here? C, C sees in A his ego ideal as a psychiatrist? Therefore, in the absence of the leader

B: That was E.

E: I say, ah, *perhaps*, I didn't say this is a way of

D: Yeah, you always say "perhaps," so what difference does it make?

E: I think it make a lot of difference.

F: Anger, anger.

E: Yeah, I'm really angry.

When we pierce through the above intellectualizations, anger, and confusion, we see the group struggling to create a replacement out of the available peer group resources to dampen their loss reactions. That this was a tenuous and unstable resolution can be detected from the above excerpts wherein the ambivalence of both the group and the heir apparent is manifest. The uneasiness of the head that wears the crown becomes so exacerbated that it topples completely the following week when the group leader returns.

LP Meeting 12

There was at first some reminiscence about the warmth and tenderness of the preceding meeting. That there was some confusion about the affective memory can be observed by C's remark very early in the meeting:

C: I was particularly interested in this, ah, business of the, ah, positive feelings, since I was right in the middle of it and took rather a beating.

E: Well, C, I, I was wondering about that myself, ah (pause). I think it was brought up in the last meeting that, ah, I don't know who said it or use the exact word, but, ah, it was implied that, ah, it seemed that group members were able to express themselves better with Dr. —— being absent, I guess; the reasons, I don't know.

B: The meeting before, before the last one, we had a very angry meeting when Dr. —— was here; and we had a very contrite meeting when he wasn't here. Last meeting we had a more of a sort of, well, at first it was angry and then we were talking intimately, that's when he wasn't here. Now this meeting, we've talked about mostly being intimate with ourselves, and nobody has anything to say.

D: It's like having a new doctor, changing doctors. I was thinking that before I thought to myself that it's, ah, it's like visiting with a new, it's like being

interviewed by another doctor today, and, ah, going through that more than one patient says, said to me, who had been in and out of mental hospitals so many times: "I've been through this since—over and over again." We're always, it seems, faced with the problem of bringing last week's absent members up to date for integrating them. I don't think we'll ever, ever get to that point until we, we do something about our attendance; until we are a warmer group.

(*Long Pause*)

B: You sounded very gloomy just reading your report this morning.

D: Well, I won't blame it on my car or on the weather.

(*Pause*)

B: You feel gloomy?

D: Yes, I do, B, and, and I'm not going to tell this new doctor why.

Recall that D, the previous week, was cited by the replacement leader as one who shared generally his own feelings about the group's independence from the leader; D also was a main supporting member of A during the previous meeting and his "gloominess" in this meeting probably stemmed from "changing doctors"; i.e., objects of identification. In a capsule we see the pain of reshifting energy from one to another object, the energy transformation accompanied by mourning.

Shortly after this exchange the group members begin to chisel away at the temporary scaffolding of the replacement they had constructed the week before.

B (one of A's main supporters of the preceding meeting): I was thinking about your statement [to C] of identifying with A and this sort of made me mad because to me A is the antithesis of what I would like to see in this group. A, A, ah, is very controlled and he does, you, you know very little about A. [Read B's statement of the previous week.] Actually what he feels is unknown; over and over again it comes out that he felt this way during the meeting and he felt this way last meeting, but he wouldn't say it, which all means to say that when you look at A during the meeting, he may be seething or he may not be, but he doesn't tell you, ah, whereas at the beginning [to C] you told some rather personal things, ah, but then later on, you decided A was the best way to be, and this seemed to me just, just a retreat rather than an advance. I'd rather have A do what you're doing than you do what A does; so we all become A's and we're all doing nothing except sit around and impress each other with our, with our competence and our knowledge, and ability to control ourselves.

(*Long Pause*)

C: Well, the thing I said last week, ah, the thing I admired about A's behavior is that, ah, he seems to be quite well adjusted to the group and at the same time he seems to understand a lot of what's going on.

B: Yeah, I agree, he does seem to be, I'll agree that he is. Maybe I mean what's "well-adjusted to the group" mean? That means that everything in the group does, doesn't bother you one way or another?

C: Well, I feel that he doesn't go to extremes one way or another.

B: Doesn't express extremes, or he doesn't go to the extremes, really? (Mumbling) I'm not sure how you can tell with somebody who doesn't tell (laughs) how it affects him.

This exchange was followed by long gloomy periods, marked by lengthier pauses than usual, finally interrupted by a group member who asked the leader why the group was so gloomy this session.

The striking aspect of the exchange above is, of course, the mercurial disenchantment of B, just the week before A's most admired devotee ("And he only speaks at appropriate times and says worthwhile things. . . . A better psychiatrist."). And B's sentiments were shared to a greater or lesser degree by other group members. Just those traits which seemed to endear A to the group the previous week, by some curious alchemy, now appeared to alienate him.

Some speculations which emerge from our theoretical framework may provide a partial explanation for this phenomenon. The first obvious point is that the replacement can only function and succeed under conditions where the real leader is *permanently* absent. What is identified with during the leader's absence—as unresolved vestiges of the lost leader—is eclipsed considerably by the real leader's return. Feeding into this are two correlative notions. First, that those members who presumably deserted the leader for the replacement leader feel "taken in" by the replacement. It's as if they were saying: "We've been conned. He isn't the real leader at all; just an imposter." The wish to overthrow the leader, shared by all group members, is a fraud in reality. The forbidden act—seen now as perpetuated solely by the "fallen" hero—forces group members to project their bad impulses on the unsuccessful replacement. This would partly account for their repulsion toward the replacement. Second, the guilt associated with their abortive desertion of the leader and promotion of a peer "behind his back" may account for the gloominess which prevailed from the very beginning of the meeting, as well as account for the reparations paid to the leader subsequent to the attack on A. (B, for example, shortly after his disaffection from A goes on to reveal "deep-rooted feelings and fears" concerning the leader.)

We can now summarize the complicated vicissitudes of this defense somewhat more concisely. As a way of alleviating the depressive anxiety over the lost leader, the group searches for a unique restitution of the lost object by selecting one of their own peers as a replacement. Selection of the peer replacement, I propose, is not accidental but is a strategic and complicated decision among members to select a replacement who is perceived as representing those traits of the lost leader about which the group members feel most ambivalent. This unique restitution through "succession" by

a peer group replacement serves a number of needs through projective identification: (a) anxiety over loss is warded off by a replacement; (b) revenge toward the lost leader is projected onto the replacement; (c) the wish to overthrow the real leader is projected onto the replacement.

In conclusion, some material from this defensive behavior has led to a provocative and tentative speculation which has some general implications for the study of loss and identification in groups. Recall that A was attacked for precisely those characteristics which were attributed to the leader, but which could not be directly criticized due to inhibitions against aggression toward the leader. Thus, we see the projection of bad impulses onto the failing replacement and the concomitant idealization of the leader. An excerpt of B tends to corroborate this notion:

B: Our feelings toward the leader are so deep-rooted. I'm always thinking about that. I very seldom say anything to Dr. ——; I can't bring myself to. I, as I was thinking about it, I am pretty sure I know why. The leader represents a person to me so much that gives approval that I can hardly bear to say anything to somebody like that—especially in this kind of group where he does not give a reply. And I find it very difficult to be, ah, to feel I will be rejected by the leader, ah, that, that, that is as I thought about it. Then I thought to myself, "Well, I probably can talk to the leader and if I make an effort I could." But I'd have to make that effort sort of consciously over time. It strikes me that everybody's relation to the leader's going to be that type of a thing. Not necessarily anywhere near the same dynamics, but you ask, why don't we accept the leader as a group. And I'll say because if you, you could find out why every member had the feelings toward it, then you could find out.

(Pause)

C: Somehow or other, we don't accept him, more or less; that's I think pretty much, ah, actual observation.

B: Well, I'd love to do something about it.

In this case, the unique restitution, a peer group replacement, while not wholly a successful venture, was probably a stronger adaptation to the loss than the three aforementioned defenses.¹²

Freud has pointed to a defensive identification wherein a substitute for "a libidinal tie is made by means of the introduction of the object into the ego" (7, p. 65). Now we can speculate that A, who had succeeded in this introduction (an identification with the aggressor), or is perceived by group members to be "like the leader," can be utilized by group members

¹² The primal horde hypothesis cannot, of course, be accepted at face value. And yet the fact that large formal organizations provide automatic rules for succession indicates that certain restrictions have to be made against revolt. "It may be that the revolt represents a realization of important fantasies individuals hold in all organizations, that the emotions involved are undercurrents whenever rebellious and submissive tendencies toward existing authorities must be controlled. These are the themes of some of our great dramas—*Antigone*, *Billy Budd*, *Hamlet*, and our most recent folk tale, *The Caine Mutiny*" (2, p. 425).

both as a savior while the leader is absent and the culprit during the leader's presence.

Let us strengthen the case for this speculation by quoting from Freud's *Group Psychology and the Analysis of the Ego* at some length:

Another such instance of introjection of the object has been provided by the analysis of melancholia, an affliction which counts among the most remarkable of its existing causes the real or emotional loss of a loved object. A leading characteristic of these cases is a cruel self-depreciation of the ego combined with relentless self-criticism and bitter self-reproaches. Analyses have shown that this disparagement and these reproaches apply at bottom to the object and represent the ego's revenge upon it. The shadow of the object has fallen upon the ego, as I have said elsewhere. The introjection of the object is here unmistakably clear (7, p. 68).

Now, if we use the individual as a model for the group, we have Resident A, whose characteristics were introjected as a unique restitution to ward off anxieties about the loss of the real leader. Upon the return of the leader, the reproaches which apply to the absent leader fall upon the introjected replacement leader. Freud goes on:

But these melancholias also show us something else. . . . They show us the ego divided, fallen into two pieces, one of which has been altered by introjection and which contains the lost object. But the piece which behaves so cruelly is not unknown to us either. It comprises the conscience, a critical faculty within the ego, which even in normal times takes up a critical attitude towards the ego. . . . We have called it the "ego ideal" (7, p. 68).

The transformation to the group now becomes clearer. The introjected object pales in the eyes of group members before the competing ego ideal, the leader, and critical rage vents itself against the introjected for two reasons: (a) because it does not measure up to the standards of the ego ideal ("A isn't my idea of a good psychiatrist."); and (b) because the revenge which cannot openly be expressed toward the deserting leader can be projected onto it.¹³

These aforementioned mechanisms represent the most pervasive elements in group life for dealing with depressive anxiety. There are others, of course, which cannot at this time be analyzed. And other mechanisms of projective identification are concerned with different sources of anxiety. For example, Anna Freud's discussion of "identification with the aggressor" and "altruistic surrender" are probably related to "paranoid-schizoid" anxiety.

¹³ It should be made clear here that this introjection of the characteristics of the replacement is a *super-ego* incorporation. "An ego which with the aid of the defense-mechanism of projection develops along this particular line projects the authorities to whose criticism it is expressed and incorporates them in the super-ego. It is then able to project its prohibited impulses outwards" (6, p. 138).

ety. What ultimately is needed is a typology of anxieties and characteristic mechanisms (in terms of projective identification) associated with the anxieties. Other forms of projective identification noticed but not discussed in detail here are "identification with work"—a form of an identification with the aggressor—and homosexual tendencies which were only touched upon in the discussion of idealization.¹⁴

COMPARISON WITH LATER LA MEETING

I mentioned earlier that it might be instructive to discuss an LA meeting which occurred much later in the group's experience, meeting 34. The following excerpts best illustrate the emotional climate of the group during this meeting.

M: Then that raises the question, what, what, what is it we want and we expect and can't have?

N: Being taken care of. I think that, ah, ah, you see it much more strikingly in patients, ah, but it seems to me that, ah, we haven't, ah, maybe never will completely give up the idea of being taken care of. I sat here and thought of that and tried to connect it with the going back—in psychoanalytic theory I guess that it would be made more possible to get, give up this idea by understanding what had happened in the beginning. [He is referring to the beginning of the group meetings.]

(*Later On*)

O: So that even when the leader isn't here, he's still here just as much really.

Q: Yeah.

O: And we use what he said before rather than needing him sitting here and making comments now. He's still here, and every one of our relationships is that.

Q: Because he's a hub?

O: Yeah.

Q: It's taking a big piece of cheese.

N: You mean you don't believe in the old saying, "Out of sight, out of mind"?

(*Laugh*)

R (later on): I'll tell you of a chance observation I had to make for what it's worth. Z was a resident here last year, left in June and came back, ah, some

¹⁴ The dream which was reported in meeting 11 (LA) was clearly homosexual in nature with group members singing in a chorus and appearing as young girl dancers. Save for one group member, all faces were more or less bland and identity-less; the leader was seen as at least three characters in the play: Romeo, the dreamer's mother, and the dreamer's wife. This meeting gave rise to very positive feelings among members which embarrassed some by its closeness. And during the meeting, one of the group members was thought to be taking over the leader's role; and in fact, one member did, with some finality, sit in the leader's chair when the meeting was under way, expressing the members' cohesiveness against the leader.

time the middle of last week, on a visit, he'd gone into the service, he asked me how things were going here, and I told him, well, it seemed to me, now with three months left, that I had to go through some process of assimilation of all that had gone on. He said, well, his experience that hadn't occurred in the last three months, when he had gotten into the service, he found himself with groups, talking like the leader with individual patients, talking like, I don't know all the figures he mentioned, but Dr. —— stood out in my mind because he found himself making comments like, like Dr. —— had been making, and operating much like him.

S: Which is trying, which is solving the problem of loss by identification.

(Very Lengthy Pause—Restless Coughing and Noise)

M: Perhaps, ah, it's almost as though, ah, we kind of learned the psychoanalytic approach, and what it means here, in a way, when we first began talking about what's going on here, and then we got to talking about, ah, why is it going on. Ah, we're sort of thinking now in terms of going back to earlier relationships, and wondering what happened to us that, ah, that makes this happen, you know (pause), we sort of learned an approach.

(Pause)

O: I wonder, is there any difference in, ah, the way people feel now, versus the way they felt before when the leader wasn't here, and this, I don't know.

N: You, you're, you're having a different feeling, aren't you?

O: Yeah, yeah.

N: I think I am, too.

Q: One thing I think, ah, we can, we can, ah, accept the loss a little more realistically than we could, before we acted out, ah, we did all sorts of things, immature things.

N: You mean we admit the loss now instead of just trying to deny it?

(Chatter)

N: Now we can tolerate it.

S: Instead of just chatting on, you feel unhappy in a sense.

N: Yeah, I feel a loss.

S: That's what I was thinking about these, ah, what does it mean to work through losses and things, essentially what it probably means is that you face up to the fact essentially of feeling loss and then, ah, you, you somehow accept it but you, that doesn't mean the feeling goes away.

N: No, that's what X keeps harping about all the time.

Q: I was talking to Y about, I mean, doesn't necessarily mean you didn't need him, ah, we'd miss him probably, but that we still operate and function without him, it doesn't mean that we could collapse, without him.

N: The psychotic person becomes crazy at this point, when, ah, they suffer loss.

S: It's not because the person is gone, but because they're let down, or they can't go on, and that sort of stuff.

N: The sick patients.

T: But these fantasies still go through our minds too, ah, at some time or another.

S: That is what the working through the loss is.

These excerpts require very little comment; the group members have done that for us. The desperate need for constructing defenses, directed against pining for the loved object, seems to have diminished. The group seems to have acquired what for Freud was the essential aspect of a primary group: "a number of individuals who have substituted one and the same object for their ego ideal and have consequently identified themselves with one another in their ego" (7, p. 80).

The work of mourning continued as an obligato throughout the life of the group; decathexis proceeded, memory by memory. Note in this meeting there was some reference to the "beginning" and the members' initial attitudes toward the leader. Also of interest is their "operating" like him, taking on his characteristics. The comment on "out of sight, out of mind" is a classic imitation of the folk aphorism customarily employed by the leader. They "learned an approach." Concomitant to, and a part of, the mourning, was a development of giving and taking among group members, a communal brotherly milieu. (A good deal of discussion, not reported here for space reasons, dwelt on "kibbutzim" and communal living.) Finally, there was the direct recognition of the leader's significance and their learning from him. In meeting 35 when the leader returned, one of the members said:

T: Has anybody told Dr. —— how much we missed him last week?

U: We sure have.

(*Laugh*)

S: And I was wondering if we weren't talking about this all the time.

M: We really talked a lot about that last week, about the ending of the group and what would be beyond there, beyond the pleasure principle.

S: Yeah, we seem to feel a little bit depressed, mourning, ah, has a different tone for meetings. Long ago when Dr. —— was absent, there seemed to be more hostility and outward expression of anger, and, ah, now it seems to be a little more tender.

T: Well, you know.

"Reality," as Freud said, "passes its verdict—that the object no longer exists—upon each single one of the memories and hopes through which the libido was attached to the lost object, and the ego, confronted as it were with the decision whether it will share this fate, is persuaded by the sum of its narcissistic satisfactions in being alive to sever its attachment to the non-existent object" (9, p. 166).

SUMMARY

Briefly stated, the central idea of this paper was an attempt to extrapolate the Freudian formulations of identification in order to account for defensive (projective) identification behaviors. The particular type of projective identifications treated here related specifically to depressive anxiety, anxiety over a lost object. The group under study provided an interesting crucible for this analysis because the group leader was absent for a substantial number of early meetings.

Simply stated, projective identification is a process of splitting off good and bad impulses and dynamically projecting them onto and into social objects. The interplay among these projections determines a good share of group life. Four mechanisms of projective identification were delineated in this paper: (a) *Fantasy projection*, where dream symbols dissipated energy away from the source of anxiety into disguised, external, and hence, safe objects; (b) *Manic denial and idealization*, where the source of anxiety was denied, and, aided by good impulses, projected onto figures who could, in this case, take the place of the protective leader; (c) *Scapegoating*, where the bad impulses related to the absent leader were absorbed and deflected by "innocent" group members; (d) *Restitution of the lost object: peer group replacement*, where a replacement ego is introjected in the service of dampening anxiety concerning the loss of the real leader.

These mechanisms, in more muted and indirect ways, are probably present in all social organizations where loss of significant objects is encountered.¹⁵ Indeed, it would seem that problems of "loss" and "succession" in formal organizations might be more fully understood if they could be analyzed in terms of how the membership managed anxiety attendant on loss.

¹⁵ Howard Perlmuter raises the question: "What is the difference between losing a member of the group and losing a leader? I do not think they really are quantitative differences but important qualitative ones. My main impression is that there are more *persecutory* feelings in the loss of the leader than there are in the loss of a member" (personal communication). This is a fair question and can be put to empirical test. Plans are being made for experimental investigation of this question. Equally fascinating questions arise in terms of loss: temporary-permanent, excusable-inexcusable, imposed-elected, accidental-intentional, abdication-overthrow. These all may have different effects. The effects of group composition must also be taken into account. The group under consideration here is, after all, a highly sophisticated one; one in which the value-orientation prescribes a verbal, intellectual effort to understand the dynamics of the unconscious. I would guess that specific defenses might well be related to the particular composition of the group, that a less well-educated membership would tend to use less intellectual defenses, e.g., more scapegoating. This is a question well worth exploring and about which I can now only be tentative and circumspect.

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FAMILY MEMBER PERCEPTIONS OF PARENT ROLE PERFORMANCE¹

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Studies of family behavior are increasingly pointing up the importance of analyses of family member perceptions of parent-child roles. Such an emphasis stems from a recognition that conflict and disagreement among family members not infrequently result from differences in the evaluation of day-to-day patterns of interaction, and that the identification of differences in perceptions of family member roles is an important step in determining the etiology of familial conflicts.

Several investigators (3, 4, 5, 7) in studying the perceptions of single groups of family members (fathers, mothers, adolescents) have made significant contributions concerning (a) conceptions of characteristics of "good" mother, father, and child roles and (b) actual role performance of family members. Still others (1, 2) have been concerned with the extent to which conceptions of one member of a family reflect the role conceptions of other members of the same family. However, because little attention has been directed to a study of the degree of personal bias which is reflected in the subject's evaluation of family member *role performance*, the present investigation has undertaken a study of the perceptions of members of the same family concerning role performance of parents.

Specifically, it was the purpose of the study (a) to determine whether the perceptions of role performance are a function of the role of the family member responding (father, mother, or adolescent); (b) to obtain indices of agreement concerning perceptions of members of the same family; and (c) to ascertain whether there is a tendency for one group to rate parental performance more favorably than the other groups.

In one of the initial studies on parent-adolescent relationships undertaken at Florida State University (2), no significant differences were found to exist among fathers, mothers, and college-age youth with respect to their conceptions of good father, good mother, and good child roles. These findings suggest that insofar as role conceptions of what constitutes "good"

¹ The authors wish to express appreciation to the Florida State University Research Council for financial support of the research on which this paper is based, and to Dr. Theodore B. Johannis, Jr., University of Oregon, for his contribution in the development of the instrument which was used in the study.

family member roles are concerned, college-age youth reflect conceptions which are similar to those of their parents. A later study (1) investigated role conceptions of a younger (tenth-grade) group together with the conceptions of their parents. Evidence was found to support the hypothesis that significant differences exist among fathers, mothers, and adolescents concerning their conceptions of good family member roles. Because all of the students in the initial study were university students enrolled in a course including material on marriage and the family, and thus represented a highly select sample, it is difficult to generalize from the findings of these two studies. Perhaps as adolescents mature, their conceptions may reflect greater agreement with their parents than at earlier levels of development.

The present report describes a phase of the study of the high-school youth and their parents. It should be noted that an important difference exists between the present analysis of responses of high-school youth and the study reported earlier (1) which was concerned with agreement of family members' conceptions of "good" parent and child roles. Whereas the earlier study focused on differences in *role conceptions*, the present study is concerned with differences in perceptions of actual *role performance*. It is evident that an individual's role performance as a father, for example, may be deficient (by a given culture's standards), and yet his perceptions of what a "good" father is like may accurately reflect the cultural prescription. Thus, it would not necessarily follow that because family members were in agreement, or were not in agreement, as to what constituted "good" family member roles, they would necessarily agree, or disagree, on how well members performed their roles.

That differences do exist among family members in their evaluations of role performance is evidenced by the research of Hess and Goldblatt (6) which indicated that among their subjects the adolescents evidenced a much higher opinion of the adults than did their parents while the parents anticipated that the teen-agers would evidence a tendency to undervalue the adults.

METHOD

A sample consisting of fifty adolescents, twenty-five males and twenty-five females, enrolled in the tenth grade of the Leon County High School, Tallahassee, Florida, and their mothers and fathers, was selected according to a table of random numbers. The sample consisted of a broad socio-economic range of intact families, predominantly Protestant, living in the Tallahassee area. The subjects responded to selected questions concerned with parental role performance. Each participant responded individually to a questionnaire within which were 17 items concerning the mother-child relationship and 17 items concerning the father-child relationship. The adolescents completed their questionnaires during a regular class period at school, and the parents completed theirs at home. Two ques-

tionnaires with parallel items were delivered to each home with the instructions that the parents were to respond to their questionnaires independently and that they were not to alter their responses after they had compared them with their spouses'. The parents' questionnaires were reclaimed within 48 hours.

Parallel items were presented to the parents and their children. For example, the parent item, "I nag my child . . .," was presented to the youth as "My father nags me . . ."; "My mother nags me . . ."

The subjects responded to the items on a variety of five-point continua, e.g. (a) always, almost always, usually, sometimes, seldom or never; (b) always fair, almost always fair . . .; (c) do exactly as told, do about as told . . .; (d) in all situations, in most situations . . .

The parallel items were analyzed for the father's and child's perceptions of the father's role performance and for the mother's and child's perceptions of the mother's role performance.

To determine whether the nature of the rating of the role performance of the parent was a function of the role of the family member responding (father, mother, or adolescent), a chi-square analysis was employed. To obtain evidence concerning the extent to which differences in ratings of role performance existed among members of *the same family*, percentages of agreement were calculated.

RESULTS AND DISCUSSION

In general, the data fail to support the belief that the ratings of parental role performance are dependent upon the role of the family member responding. There were, however, several exceptions.

A comparison of the responses of the fathers and adolescents concerning the question of interest in what the child does revealed a relationship significant at the .001 level: The fathers' ratings indicated that they were more interested in what their children were doing than the adolescents perceived their fathers to be.

An analysis of the responses of the fathers and adolescents and the mothers and adolescents to questions concerned with the generosity with which the parent spent money on the adolescent yielded chi-square values which were statistically significant at the .01 and at the .05 levels, respectively. These results indicated that the perceptions reported were a function of the role of the family member responding. In both instances, the adolescents indicated their parents to be more generous than their parents felt themselves to be.

The responses of the mothers and adolescents concerning the question of how the mothers and adolescents "got along" revealed a relationship significant at the .05 level between rating of respondents and their roles. The responses of the adolescents revealed a more favorable evaluation of the mother-child relationship than did those of the mothers.

The data indicate that considerable similarity exists between fathers and mothers with respect to their ratings of their relationships with their adolescents. The responses, however, indicated that mothers nagged their adolescents more frequently than did fathers.

The percentages of specific and nonspecific agreement are reported in Table 1. When two family members responded identically, the agreement was designated as *specific*; however, when the responses were as much as one scale step apart, the agreement was designated as *nonspecific*.

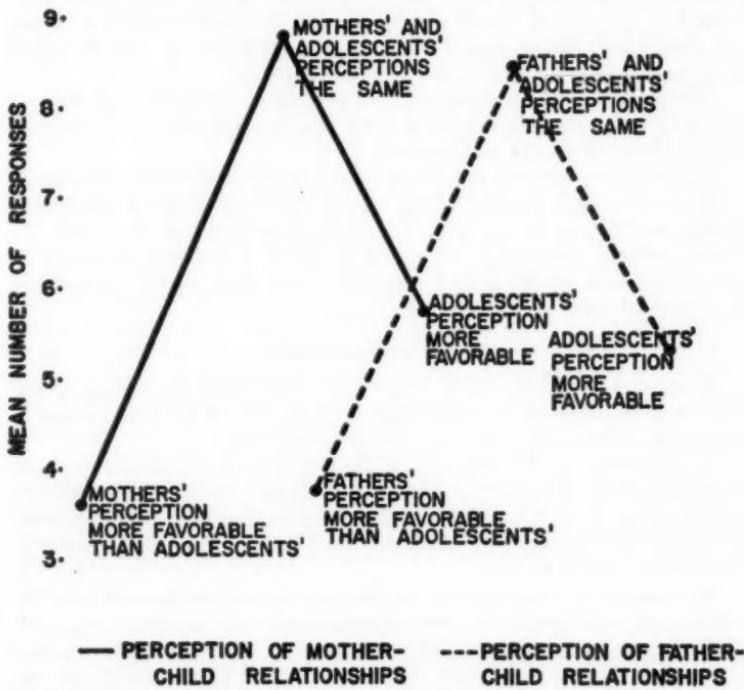


Fig. 1. Perceptions of parent-child relationships.

Although it became clear in the analysis of the data that the ratings between fathers and adolescents and mothers and adolescents concerning role performances were independent of the group of subjects responding, i.e., whether fathers, mothers, or adolescents; it was deemed desirable to ascertain if there was a tendency for one group (fathers, mothers, or adolescents) to portray the relationships more favorably than the others. In Figure 1 such a comparison is made. Although it will be noted that the

TABLE 1
PARENT-ADOLESCENT AGREEMENT ON THE RELATIONSHIP BETWEEN THEM

Parent Items*	Specific Agreement (%)			Nonspecific Agreement (%)	
	Fathers- Adolescents	Mothers- Adolescents	Fathers- Adolescents	Mothers- Adolescents	Mothers- Adolescents
I am interested in what my child does	60	74	74	74	96
When my child asks me questions, I give him (her) honest answers	54	72	84	84	98
I respect my child's opinion	42	48	84	84	86
I consider the punishment which I give my child	48	40	80	80	84
I nag at my child	50	52	80	80	86
Considering the amount of money I have, I consider that I spend it	32	44	76	76	84
on my child					
When I make my child do something, I tell him (her) why it is necessary	22	42	70	70	78
I approve of how my child behaves	44	36	92	92	76
When my child wants help with homework, I help him (her)	30	26	76	76	66
When I tell my child to do something, he (she) usually	60	66	92	92	86
In giving my child information about sex, I	61	58	76	76	84
Of the problems of young people the age of my child, I think I understand	54	54	88	88	90
If my child were in trouble, he (she) would tell me	48	56	80	80	94
I scold my child	62	56	90	90	96
Generally, my child and I get along	58	44	96	96	97
My child feels that I approve of how he (she) behaves	43	40	90	90	88
I discuss with my child	44	38	78	78	80

* Parallel items were given to the adolescents.

ratings of the mothers and adolescents and the fathers and adolescents were similar, in a greater number of instances the adolescents' ratings were more favorable than were those of either the fathers or the mothers.

The present study tends to support the conclusion of Hess and Goldblatt (6) that adolescents evidence a "higher opinion" of adults than do their parents. More important, however, it suggests that precise descriptions of family member role performance may not be obtained through studies of the perceptions of adolescents, although it does suggest that fairly reliable *estimates* of role performance may be obtained from studies of single groups of individuals, e.g., adolescents. This may be important for the researcher since adolescent subjects are often more easily obtained than adult subjects.

SUMMARY

It was the purpose of the study (a) to determine whether the ratings of parent role performance are dependent upon the role of the family member responding, (b) to obtain indices of agreement among members of the same family concerning role performance, and (c) to ascertain whether there is a tendency for one group (fathers, mothers, or adolescents) to rate the role performance of parents more favorably than do the other groups.

A random sample of fifty adolescents and their mothers and fathers responded to selected questions concerned with perceptions of parent-adolescent relationships.

The major findings were as follows:

1. In general, the data fail to support the belief that the perceptions of the parent-adolescent relationships are a function of the role of the family member responding.
2. In the vast majority of instances the ratings of the fathers and mothers were within one scale step of each other. Greater agreement was evidenced between the responses of the mothers and adolescents than between those of fathers and adolescents.
3. Although the ratings of the mothers and adolescents and the fathers and adolescents were similar, in the majority of instances the adolescents tended to rate parent-adolescent relationships more favorably than did either their fathers or mothers.

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CHANGES IN SONG LYRICS AND SOME SPECULATIONS ON NATIONAL CHARACTER

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Speculations on national character have been much in vogue the past few years, but not without misgivings. Social scientists are understandably reluctant to make global assertions about an entire culture from evidence which is, at best, incompletely documented and, at worst, vaguely impressionistic.¹ Still, most observers would agree that meaningful inferences concerning the nature of social interaction in a culture can be derived from an examination of that culture's mass media. It is true that the observer must assume a kind of parallel between the content of the mass media and the need structure of individuals in the culture; moreover, he is committed to the dangerous practice of making inferences about consumers rather than producers. Nonetheless, despite a less than rigorous methodology, the analysis of mass media content should provide meaningful data for the selection of pervasive national characterological trends.

The present study is an examination of changes in popular song lyrics over a thirty-year period. Popular songs were selected for study for a variety of reasons. First, their banality is a distinct advantage. Unencumbered by intellectualization processes entering into most literary productions, the theme of the song is usually stated in simple and direct terms. Second, the combination of words with music produces a relatively uninhibited expression of needs ordinarily difficult to express in everyday discourse. Third, most popular songs are more or less unidimensional: that is, they convey one theme which is given several times in repetitive fashion; thus classification of themes is a simple matter.

HYPOTHESIS

The principal hypothesis of the present study is that the postwar period has witnessed a gradual disappearance of "romantic" love as a guiding principle in heterosexual relationships. By romantic love is meant the tendency to exalt the love object in a way that produces not only overvaluation of that person but also a depreciation of self. Freud's descrip-

¹ The pitfalls of research into national character have been ably summarized by Inkeles and Levinson (4). Their position is that there is no adequate substitute for a detailed study of numerous individuals in the culture.

tion of love corresponds to what is being termed here as romantic love: "The highest form of development of which object-libido is capable is seen in the state of being in love when the subject seems to yield up his whole personality in favor of object-cathexis" (3, p. 33). Freud goes on to say that love must be returned or the narcissistic hurt cannot be healed. "Love in itself, in the form of longing and deprivation lowers the self-regard; whereas to be loved, to have love returned, and to possess the beloved object, exalts it again" (3, p. 57).

Romantic love, as we view it, derives from attempted repression of Oedipal conflicts. (It is possibly for this reason that romanticism was so prevalent in Freud's descriptions of love.) The problem set by Oedipal-derived repressions in the area of love is the inability to reconcile the tender components of sexuality with the erotic components, with a consequent distortion of the partner's actual qualities. The love object is eroticized only if the relationship is transient rather than permanent. Alternatively, the lover can be sentimentalized and desexualized or, in some instances, viewed in pregenital terms as a kind of partner in "play."

In contrast we view present attitudes toward love as less obviously based on the mechanism of repression. With less need to overvalue the love partner, conflicts in heterosexual relationships in the areas of dominance, submission, hostility, and dependency become more openly expressed.

Obviously, a detailed rationale for our hypothesis would necessitate an explicit description of changes in Oedipal-based conflicts over the past several decades. This rather formidable task is dismissed in favor of a simple explanation, *faute de mieux*, that seems to have intrinsic plausibility: namely, that changes in parental roles and child-rearing practices have tended to reduce the influence of Oedipal-derived repressions in the realm of heterosexual relationships.

The writer's assumption is that the lyrics of popular songs reflect this change in cultural emphasis. Specifically, it is asserted that love songs of a previous era have a more repressed quality which is manifested by the glorification of love in contrast to the more dysphoric songs of contemporary American culture.

METHOD

The following 13 categories were derived from the above conceptions and used to code the songs in this study.

1. Narcissistic overvaluation or idealization of love object.
2. Emphasis on connubial bliss or domestic felicity.
3. Nostalgic yearning for lost love object, either with the implication that love object cannot be regained or that love object will be regained in future.

4. Phallic playfulness. Goal is sexual gratification, but with mutual consent.

5. Euphoria produced by state of love. Emphasis is on love as a unique or idyllic experience. As compared to Category 2, the relationship is less well established.

6. Sadomasochism. Emphasis is on some aspect of fairly strong dominance or fairly strong submission.

7. Infidelity. Love partner has found, or is going to find, or there is a fear that he or she is going to find, someone else.

8. Rejection. Differs from infidelity in that no third person is mentioned or implied. Emphasis is simply on rejection by love partner.

9. Yearning for love or solicitation of love. No love relationship has yet been established and the person yearns for love.

10. Protestation of love. Emphasis is on insistence of love for love object.

11. Seductiveness. The love object has to be tempted or cajoled. This category overlaps with number 6 since dominance or submission is stressed. (Category 4 is more playful and devoid of implications of conquest.)

12. Inconstancy of love or pitfalls of love. Rejection or infidelity are not mentioned explicitly, but the emphasis is on the possibility of disillusionment or psychic pain as the outcome of a love relationship. Also in this category would be the need to enter a love relationship with an attitude of wariness or caution.

13. None of the above.

The two eras selected for comparison were 1925-1931 and 1949-1955. The beginning of the earlier period marks roughly the advent of radio and a corresponding increase in the number of popular songs. Although it is impossible to equate the two periods for the merit of songs (whatever the criteria for making such judgments may be), the beginning point of the later period was chosen so that ASCAP (American Society of Composers, Authors, and Publishers) songs, long banned from the air, would have proper representation. Another consideration was a rough equation of the two periods for economic conditions. Although the earlier period extends into the depression for two years, cultural lag in the content of mass media precludes any appreciable effect of the depression on songs for the years 1930-31. It will be noted, too, that there is only a slight difference between the two eras in time intervals after the two World Wars.

In selecting love songs of the earlier period for study, a variety of sources was utilized which included a list of popular songs for each year published by ASCAP and titles from record albums, issued by Decca records, of the supposedly most popular songs for each year. These sources were supplemented by popular songs listed in two books, *Variety Radio Directory* and *They All Sang*, a history of vaudeville by E. B. Marks.

From a total list of songs so obtained, all songs not primarily concerned with heterosexual relationships were arbitrarily excluded. From the remaining popular "love" songs, a group of 100 was selected randomly.

For the later period, use was made of the surveys conducted by *Billboard* magazine which, at the end of each year, publishes a list of songs most popular for that year. This list is based on a variety of indices such as the number of records sold, the number of times the song is played by disc jockeys, etc. (No information was available on the possible effects of "payola" for the period 1949-55.) The same procedure followed for the selection of the earlier songs was used to secure a final sample of 100 for the period 1949-55.

In a few instances songs were duplicated in the two lists since revivals had resulted in regained popularity. To eliminate such duplication, a later popular song which had been published in the earlier period was retained if it did not appear in the early list. If it did appear in the early list, the revived song was excluded from the later list, and another song, randomly selected, was substituted.

Complete lyrics of each of the 200 songs were submitted to two judges (one a graduate student in clinical psychology and the other a person untrained professionally) who were asked to assign each song on the basis of its lyrics to one of the 13 categories. The judges were instructed to avoid the thirteenth (unclassifiable) category if possible, and in only a few cases was this category used by either judge. There was complete agreement in the assignment of categories in 148 or 74 per cent of the songs. For the remaining 52 songs a third judge arbitrated the disagreements. Some representative songs and the categories to which they were assigned are presented in Table 1.

TABLE 1
SOME POPULAR SONGS FROM EACH ERA AND THEIR ASSIGNED CATEGORIES

1925-31	1949-55
Ain't She Sweet.....	1
Baby Face	1
I Found a Million Dollar Baby..	1
The Little White House at the End of Honeymoon Lane.....	2
When We're Alone (Penthouse Serenade)	2
Girl of My Dreams.....	3
Just a Memory.....	3
Tiptoe through the Tulips.....	4
Walking My Baby back Home... .	4
My Heart Stood Still.....	5
Precious Little Thing Called Love	5
If You Love Me.....	6
Let Me Go, Lover.....	6
I Went to Your Wedding.....	7
You're Breaking My Heart.....	7
Your Cheating Heart.....	8
Jealous Heart	8
I Wanna Be Loved by You.....	9
Why Don't You Believe Me.....	9
Secret Love	10
I'll Never Stop Loving You.....	10
Make Yourself Comfortable.....	11
If I Give My Heart to You.....	12
It Isn't Fair.....	12

RESULTS AND DISCUSSION

It was hypothesized that songs from the earlier era would be most heavily represented in the first five categories; and later songs, in the remaining categories. In general, the data support this hypothesis (Table 2). If the songs are grouped into those in the first five categories versus those in the remainder, a chi-square test of significance yields a result of 26.01, significant beyond the .001 level of confidence.

TABLE 2

NUMBER OF SONGS FROM EACH ERA WITHIN EACH CATEGORY

Category	1925-31	1949-55
1	14	2
2	11	2
3	21	12
4	7	3
5	12	10
6	5	6
7	2	5
8	5	10
9	8	20
10	11	12
11	3	4
12	1	14
13	0	0
	100	100

The most striking differences between the groups are for Categories 1, 2, 3, 9, and 12. Later songs are much less likely to romanticize the love object and are more preoccupied with the themes of loneliness, unanswered appeals, and psychological trauma should a partner be found. Although many of the early songs in Category 3 contain a note of sorrow or despair because of permanent loss of the love object, the implication is almost invariably clear that there will be no renunciation or substitution by another. Fortuitous circumstances may terminate the relationship, but psychically the love continues.

The early songs, particularly in the second and third categories, demonstrate two characteristic methods of dealing with the perennial conflict between sacred and profane love. Several songs in the second category domesticate sexuality (e.g., "My Blue Heaven," "At Sundown," "Blue Room") so that the love relationship achieves the respectability of a kind of pastorale. Another and more frequent way of dealing with the conflict is to give the partner some exotic origin (e.g., "Moonlight on the Ganges,"

"In a Little Spanish Town," "Cuban Love Song"). The actual remoteness of the person from everyday experience facilitates the expression of passion by removing any possibility of threat. Later songs, in contrast, are almost completely devoid of these two themes. Marriage, if mentioned at all, is deglamorized by being made "folksy" ("Love and Marriage"), and the Latin and Oriental temptresses of the earlier period are completely absent.

The results of this study are interesting to compare with those of Wolfenstein and Leites (7) in their analysis of the movies. For example, they found that love never diminishes in American movies. If it is true love, it remains unchanged with the passage of time. If it is demonstrated that the man or woman is not the right object choice, there is an accompanying discovery that the feeling has not really been love. Any possible frustration is removed by having the right person appear opportunely so that there will be no interval of loneliness. If the hero and heroine pass up an opportunity, there is always another chance. There is an absence of danger in sexual impulses. The hero and heroine do not accept responsibility for their impulses. They believe in the one love that will last for life. They also demonstrate their attractiveness by never being without a partner. Finally, suffering is treated as pointless and unnecessary. Nobody is emotionally vulnerable, and the notion of falling hopelessly in love with someone bad or unloving is completely alien. Lovers do not break each other's hearts.

These, then, are the principal aspects of love in American movies. What is striking is that the foregoing themes so closely resemble those of the songs of 1925-31 in the current study. The Wolfenstein and Leites analysis includes all Class A movies released in 1945. Unfortunately, Wolfenstein and Leites give no information (beyond some references to the vamp of early movies as a European import) on whether the movie themes of the middle and late '40's are peculiar to that period or are representative of fairly constant themes in the movies. In any event their conclusions are much more compatible with the songs of the earlier period and, indeed, quite contradictory to the content of the later song lyrics. A possible explanation is that movies are, for the most part, directed at an older audience than popular songs. If so, the consumers of 1945 movies might well represent the consumers of 1925-31 songs. In any event we have to consider the disconcerting possibility that the content analysis of mass media can lead to widely different conclusions about national character, depending on the medium being studied and the time sample covered by the study.

However, one can find indirect support for our hypothesis from other sources, particularly the comments on American folk songs by Erikson who sees the saga of John Henry (and the song derived from it) as a model of pervasive and lasting trends in American life because of the stress on oral insatiability, perceived rejection by the mother, and a premature

wish for independence. An inculcated distrust of the mother leads to a suspiciousness of love and personal ties in general. Folk songs reflect "not only the sorrow of having been abandoned . . . but also the fear of committing yourself to deep emotion, lest you get caught and hurt, by 'keerless love'" (1, p. 260).² One is reminded of D. H. Lawrence's assessment of James Fenimore Cooper's *Deerslayer*, Natty Bumppo, which prompted Lawrence to remark: "The essential American soul is hard, isolate, stoic and a killer" (5, p. 73).³ Erikson's conclusions about fantasied love in American life are certainly much different than the impressions given by the movie themes described by Wolfenstein and Leites. Many contemporary songs, unlike those in our early sample, tend to be in agreement with Erikson's conclusions, particularly those with a hillbilly flavor. These songs frequently are concerned with the thwarting aspects of love (note, for example, some of the early Elvis Presley hits such as "Heartbreak Hotel" and "Don't Be Cruel"); in fact, part of the difference between the lyrics of our two samples may be attributed to the presence in the later sample of some representatives of the folk song genre such as "On Top of Old Smoky" and "Good Night, Irene." There were also in the later period several hillbilly-like songs (e.g., "Tennessee Waltz" and "Your Cheating Heart").

As to possible reasons for differences in our two samples, one speculation is that the lyrics of the early sample were fashioned by people who were catering to a middle-class audience. In essence, Tin Pan Alley was a bourgeois enterprise, and many of its most popular lyricists, like Ira Gershwin and Irving Berlin, were first or second generation representatives of an immigrant culture, strongly immersed in the acculturation process. The middle-class bias of the songs is also indicated by the fact that many derived from Broadway hit musicals written by such people as George Gershwin, Jerome Kern, Vincent Youmans, and Cole Porter. In asserting that the popularity of these songs somehow reflects national characterological trends different than those of the post World War II period, we are, of course, incurring the danger alluded to at the beginning of the paper, namely, that inferences about consumers are being made from inferences about producers. However, our hypothesis demands that a certain isomorphism be assumed, and evidence about the culture of the earlier period suggests a tendency to sentimentalize (or romanticize) human relationships. It is conceivable that the popular audience for the mass media of the period consisted in large part of people whose views of heterosexual relationships were conditioned by exposure to a traditional and patriarchal European culture. This is not to assert that the European view was more

² Erikson's comment here is a reflection of a similar attitude expressed by the Lomaxes (6).

³ The inability of the American literary hero to have adult heterosexual relationships is Fiedler's general theme (2).

sentimental, but, rather, that its influence on newly acquired American culture was to reinforce the strength of repression in its classical Freudian meaning. In a culture in which sexual conquest (for both sexes, but particularly males) was a hallmark of success, "Mother Machree" and Ziegfeld's glorified American girl represented different sides of the same coin. That is to say, the need to succeed in love may have been accompanied by the denial of its potentially traumatic consequences through the twin processes of sentimentalizing and glorifying. In contrast, the more indigenous American as described by Erikson is wary of love from the beginning. In literary terms the contrast is exemplified by the difference between Natty Bumppo, the prototypical hero of the American frontier who is relieved at not having been inveigled by feminine wiles, and Jay Gatsby whose sole goal in achieving money is to provide him with access to the essentially unattainable Daisy.

In our later sample of songs it appears that more "populist" trends dominate. Undoubtedly, there are good economic reasons for the shift in emphasis (as well as some that may be completely idiosyncratic and adventitious), but we would speculate that the romanticism of the earlier period has been incorporated into more enduring aspects of American life. We might, too, by way of furnishing indirect clinical evidence for our hypothesis cite Erikson's assertion that the psychoanalyses of Americans do not reveal the classical Oedipus complex, but, instead, the feeling that one has been rejected by the mother and consequent guilt with the realization that one has in fact precipitated the rejection because of a too early striving for independence.

In conclusion it should be re-emphasized that the inferences of this study, although supported by the data, have to be regarded cautiously. Obviously, the best method for confirming the findings would be a detailed clinical assessment of people's views toward love and heterosexual relationships. Beyond the difficulties imposed by the present approach that were mentioned at the outset, other possible sources of error were introduced by the impossibility of controlling some possibly relevant variables. For example, the samples were not equated for the sex of the singer. Actually, the majority of popular songs can be sung by either sex, but some are meant to be sung by only males or females, and no cognizance was taken of this variable. Another important variable is the change in the general style of popular songs, for example, the decrease in the number of "ballads," which must of itself have some effect on the nature of lyrics, apart from the hypothesis under consideration.

SUMMARY

It was hypothesized that the last three decades have been marked by a general depreciation of romantic love in American culture. Lyrics

of popular songs were used to test this hypothesis. The results were supportive although the tenuousness of the assumptions in such a study and the impossibility of controlling all relevant variables preclude completely definitive conclusions.

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HOMEOSTASIS, NEED REDUCTION, AND MOTIVATION¹

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Max F. Meyer once wrote an article entitled "That Whale among the Fishes—the Theory of Emotion." At times, I have been tempted to paraphrase him and call this paper "That Whale among the Fishes—the Theory of Motivation." Like Captain Ahab with Moby Dick, one can become fascinated by the impressive problems of motivation theory, and if not destroyed by them, at least one takes a severe drubbing.

Today psychologists generally agree that the task of motivation theory is to explain the energizing of activity. The concept of instinct, with its incorporation of an innately determined action pattern, has largely disappeared; and the new instinct theorists, such as Cattell (10) and Maslow (23), have confined themselves to the problem of arousal and maintenance of behavior. Motivation is involved, of course, in the question of how behavior is directed, but here again psychologists seem to agree on the desirability of distinguishing between cue functions and reinforcement functions. I am therefore simplifying my task somewhat by confining my analysis to the conceptualization of energetics: an examination of certain logical aspects of need theory, drive theory, and homeostatic theory.

It would be possible, but not fruitful, to consider the history of motivational theories. I am going to refer to Young's book, *Motivation of Behavior* (35), which does this job capably, and ignore these historical questions. In the same way I propose to avoid the problem of the neurological basis of motivation. This is a field that is rapidly changing. Hebb (19), for example, has recently told of how he had to revise his conception of drives from the 1930 model nervous system to keep in contact with the 1954 model. In any event, what we need at this moment is better conceptualization rather than more physiological theorizing. The new findings from brain stimulation are exciting, but, instead of clarifying the theoretical issues, they have merely made matters more confusing. The current saying is: "If you do not think matters are confused, you are just uninformed." Certainly this has some applicability to motivation theory.

I am not so optimistic as to believe that I can offer a theory to end all theories in this area; and indeed, I do not propose to offer any ideas which

¹ Presidential Address, Midwestern Psychological Association, St. Louis, Missouri, April 29, 1960.

can properly be labeled "original," although the pattern in which they are placed may perhaps help some of you to see common elements where previously everything appeared to be in conflict. Perhaps I can venture to say that I come as a peacemaker, trying to establish a logically defensible harmonization of disagreements. This is not likely to be effective; it is the familiar fate of the peacemaker to be shot at from all sides.

My approach to the multiple problems suggested by my title is, first, to consider how we go about identifying and labeling psychological constructs, and, second, to examine the problem of merging constructs derived from different defining operations.

I assume that we are all agreed that a psychological construct is arrived at *inductively*, i.e., as the precipitate of a common element from a series of observations (Figure 1). Thus the construct, drive, finds its origin

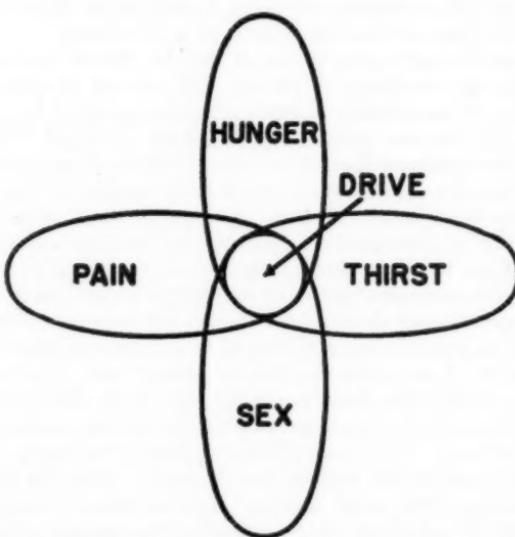


Fig. 1. The concept of drive as the common element in a series of events.

in a series of observations of organisms in which energy has been mobilized (14). The common language gives these specific events a diversity of names, such as hunger, thirst, sex, and pain, but the scientist notes that there are certain attributes in common among these instances: close relation to physiological mechanisms, major determination by hereditary influence, universal (or virtually universal) appearance in the animal kingdom, effects on behavior, and so on.

In defining a construct, however, it becomes incumbent upon the theorist to use *reduction sentences*, i.e., to state the necessary and sufficient attributes of an observation which determine our assigning it to the class of this construct. Thus we might say, "If the organism has been deprived of food for 24 hours, a hunger drive is operating if, and only if, an increase in behavioral activity occurs." By custom, reduction sentences are normally anchored to both the stimulus and the response side of such an intervening variable. In this sense all psychological constructs are response-inferred. If we are fortunate, we identify stimulus conditions which have a very high probability of eliciting the anchoring response, and in such a case the scientist may claim that he has defined his construct in terms of antecedent variables only.

The problems created by attempting to use exclusively an antecedent-variable definition can be well illustrated by the fate of Hull's construct of deprivation (21). In this case Hull sought to define a dynamic variable (the energy mobilized by the organism in a task situation) by reducing it to an antecedent condition (hours of deprivation of some needed substance) which was symbolized by the letter *H*. Unfortunately, as the experimental literature shows, *H* does not give an adequate representation of this phenomenon. The organism's normal eating cycle, for example, interferes with the manifestation of a monotonic effect of hours of deprivation.

Hull deserves a great deal of credit, of course, for boldly attempting to offer operational definitions for concepts which all too often have been lacking in clarity. I sometimes think, however, that his great prestige has made him a kind of modern-day Aristotle; you will recall that, for over a thousand years, scholars preferred to believe Aristotle's statements rather than accept the evidence of their own observations. One occasionally wonders if such a danger exists among the Hullians!

Along with operationism there are other considerations which affect the value of a scientific construct. One, of course, is *generality* or *inclusiveness*. Why was Newton's formulation of the principle of gravitation so widely acclaimed? Because he embraced, within a unitary concept, so many diverse instances: The mutual attraction of masses covered the falling of the apple, the tides, planetary motion, and perhaps even molecular phenomena. Instead of independent concepts for each category of observation, Newton offered a single, all-inclusive concept.

Related, but not necessarily identical, is the criterion of *parsimony*. We should attempt to devise concepts which require a minimum of unverified assumptions. Generally speaking, particularistic constructs such as Hull's deprivation require fewer assumptions than widely inclusive constructs such as Freud's concept of instinct. Obviously we shall seek for an optimum balance between the highly molecular, or atomistic, constructs which require few assumptions but also include few observations, and the molar, global constructs which incorporate a wide range of data but at considerable cost in precision.

These are some of the guidelines I laid down for myself when beginning to explore the concepts of homeostasis, need reduction, and motivation. It seemed to me that a logical exploration of these constructs might help to clarify my own ideas and hopefully might lead to greater mutual understanding, if not actual agreement, among proponents of diverse views of motivation.

MOTIVATION

The problems of defining a motivational state have been thoughtfully explored by Ritchie (28). He points out, for example, that you can lead a horse to water but you can't make him drink; or in more formal terminology, that if X is presented with water, X is thirsty *if and only if* X drinks. This is a concession to the obvious fact that motivational states are not controllable with precision by external manipulations and that the existence of the state is demonstrated conclusively by the occurrence of the expected consummatory response. This means—as I think most psychologists now agree—that drive states are response-inferred, not stimulus-inferred. An act provides evidence of motivation by its energy level, persistence, and variability if blocked.

I would further agree with Ritchie that many of our problems in the field of motivation have arisen because we have failed to treat drive as a *dispositional attribute*. Ritchie comments that we do not ask if solubility is somewhere inside the lump of sugar. Solubility is simply an attribute of sugar. In the same way, he suggests, drive or motivation can be treated as an attribute of behavior rather than as a dynamo concealed somewhere within the organism. Instead of asking, "How can we observe a drive?" our problem becomes one of ascertaining the conditions under which behavior shows the attributes which are agreed upon as identifying drive (14).

The fallacy of assuming that drive could somehow be identified if we had suitable methods may be called reification; this phenomenon is well known to philosophers who argue about whether ideas have real existence independent of the concrete instances from which they are inductively derived. Reification, I think, accounts for the popularity of the instinct theory of fifty years ago. It was easy to think of an inborn pattern of some kind which guided and energized behavior. Observing mating behavior, the scientist felt impelled to hypothesize a mating instinct. I shall propose instead that we deal only with attributes which can be abstracted from such observations, without implying that there is some kind of underlying reality which could be labeled an instinct.

NEED REDUCTION

A step in this direction was taken when the early behaviorists replaced instinct theory with the theory of need reduction. Activity in certain peripheral organs could be correlated with energizing of behavior and like-

wise with a deficit of substances essential for survival. This gave rise to the concept of *need* as the generalized condition of energetic arousal. In its most sophisticated form, need-reduction theory is associated with the name of Clark L. Hull. In his *Principles of Behavior*, Hull defined a primary need as follows: "When any of the commodities or conditions necessary for individual or species survival are lacking, or when they deviate materially from the optimum, a state of *primary need* is said to exist" (21, p. 17). Further, he considered that such need states give rise to a volley of stimulation, and that *primary reinforcement* could be defined in terms of the "diminution in the receptor discharge of a need" (21, p. 80). The theory is thus variably called a need-reduction theory or a drive-reduction theory.

Dollard and Miller went somewhat further than Hull in identifying drive and drive stimuli. They said: "Strong stimuli which impel action are drives. Any stimulus can become a drive if it is made strong enough." And they also proposed that "hunger can be defined objectively in terms of the effects of food deprivation" (13, p. 30).

The need-reduction theory grows out of a solid Darwinian tradition. It is typical of the American functionalist approach; and it is very close to the implicit theory of the man-in-the-street who must necessarily have a theory of motivation regardless of his failure to verbalize it.

Hull's theory is, of course, a long distance from the naïve notion that "naturally, need compels man to put forth effort." I have already referred to Hull's effort to define deprivation operationally, and to the concept of drive stimuli. This definition represented a substantial advance because it put drive into a conceptual formulation in which it could plausibly interact with a sensorimotor process such as a habit. According to this view, need, a biological state, affects receptor cells and initiates drive stimuli which energize and maintain activity until the needed substance, a reinforcer, is attained. The reduction in drive stimuli is conceived to be the effective agent insofar as reinforcement of habits is concerned.

The advantages of this kind of theorizing about motives are obvious. While the Darwinian arguments based on survival value are maintained, the drive stimuli provide a device by which the need affects the sensorimotor mechanism. The stress on peripheral mechanisms was in conformity with the behaviorism of the 1930's. Empirical data on stomach contractions, on the dryness of the mouth in thirst, and similar phenomena seemed at the time to support this kind of theory.

The troubles of motivational theory based upon needs are many. Let us note some of the more important. First, there is an unknown number of needs, defined as substances essential to the continued existence or efficient functioning of protoplasm. We know that there are many needs which are *silent*, i.e., do not elicit drive stimuli. Second, there are many situations in which the operationally defined attributes of motivation—i.e.,

increased activity, persistence, energy mobilization—appear, and in which no such need can be identified. Some simple examples of this type have been stressed by Young (36) in his hedonic theory of motivation. The organism may be incited to action by, and show reinforcement effects consequent upon, stimuli which are clearly not need-reducing (27). Third, the peripheral organs involved in a need (e.g., the stomach) may be removed and the motivational effect of deprivation is still evident. In addition to these weaknesses, we know that efforts to define drive strength operationally in terms of hours of deprivation have failed. And finally, there are many instances in which the presumed reduction in drive stimuli does not occur, and yet reinforcing effects are observable. These instances include the familiar class of behaviors in which organisms seek an increase in stimulation as opposed to a decrease; in human beings we describe these as cases in which the organism shows reinforcement effects consequent upon contacting a sign of drive reduction as contrasted with reduction in a biological sense. For example, Sheffield *et al.* (30) found that allowing a male rat to mount a female, even though copulation was not completed, served as a reinforcer. On an anthropomorphic basis we might assume that this increased rather than decreased tension; but on an expectancy basis we could argue that approaching the goal has some reinforcing value (3). In Lewin's terminology, entering the goal region may be a reinforcing event.

Drive-reduction theory has been ably defended by Brown (8), who offers an interpretation of pleasure-seeking behavior (which manifestly does not fit the theory as to the reduction of drive stimuli). Brown points out that, if the habit strength of an ongoing response is high, so that competing responses are not raised above threshold value, an increase in drive strength may simply energize the response, not end it in favor of an alternative.

There is little doubt in my mind that Brown's arguments are valid for certain situations. I feel equally certain that there are situations in which Brown's arguments are unsatisfactory. My purpose is neither to praise need-reduction theory nor to bury it, but to ask whether a broader conceptualization can save what is useful in the theory without running into some of these problems.

Perhaps the most significant statement in Brown's paper is the following: "Drive level, defined either in terms of deprivation time or stimulation conditions, can be maximally useful only if additional data about an organism's previous experience, momentary states, and responses are taken into consideration" (8, pp. 176-177). Essentially this is what critics of drive theory had been saying for some time. The concepts of drive and drive stimuli can be useful, but they must be used in a theoretical framework which takes the rest of the organism into consideration. They cannot be defined in independent, physicalistic terms as Hull sought to do.

Essentially, this admission by Brown amounts to rejection of the molecular, peripheralist conception of drive which has annoyed so many psychologists. It does not amount to accepting the rather mystical, animistic formulations which have been propounded by some of the so-called holistic psychologists. It does seem to invite a reformulation of the problem in terms which attempt to take the total organism into consideration.

Specifically, let us ask ourselves: What are the "additional data about an organism's previous experience, momentary states, and responses" to which Brown refers? Must we simply list these, or can we fit them into a conceptual framework? Essentially, what I wish to argue is that we can devise a framework which incorporates the valuable features of need-reduction theory and also the corrective factors to which Brown has referred.

I suggest that homeostatic theory can cope adequately with the problems cited above, and that it is not in contradiction to drive theory. I shall argue that drive reduction is a special case of homeostasis, and that the detailed machinery devised by Hull and others for this purpose, e.g., the role of drive stimuli, is usable in homeostatic theory too. In other words, I believe that a somewhat broader framework can capitalize on the advantages of the drive-reduction view without encountering some of its problems.

HOMEOSTASIS

Let me begin by saying a few things about the concept of homeostasis as I employ it. Homeostasis appeals to me because it is inclusive and cuts across various levels of observation (31). But by this same token it tends to require more unverified assumptions than more particularistic approaches to motivational phenomena. The concept first acquired prevalence in psychology when it was pointed out by Cannon (9) that organisms show a variety of steady states, and that disturbance of such a steady state tends very often to be followed by action which restores the prior state. This seems to provide a substitute for the concept of need, avoiding as it does the questions of whether *only* needs are energizing, and of whether *all* needs are energizing.

Other problems have arisen, of course, with the meaning of homeostasis. Some psychologists have reified homeostasis, treating it as a force like the Freudian libido. This usage I reject. Homeostasis is only a concept, abstracted from numerous instances in behavior which illustrate restoration of equilibrium (32). It is a principle like gravitation; nobody says gravitation causes an object to fall, but falling objects illustrate gravitation.

Other writers have identified homeostasis with the response mechanism itself (12). I would likewise reject this view. There are some important implications for motivation theory, however, which can be developed by examining the question of homeostatic response mechanisms.

The simplest homeostatic mechanism would appear to be that of the buffering systems in the blood stream. For example the pH of the blood—the acid-alkali balance—is held remarkably close to a uniform value. Deviations to either side are countered by substances in the blood stream which bind in a nonionized form the excess material. This kind of equilibrium maintenance, however, is of limited utility unless the organism has a second line of defense upon which to fall back if the deviation exceeds the capacity of the buffering mechanism. As we shall see, the more complex levels of homeostatic process are characterized by multiple thresholds and by successive mechanisms which are brought into action as each threshold value is exceeded.

We can illustrate this notion of multiple thresholds most readily by reference to the problem of temperature control. Body temperature of warm-blooded animals tends to vary only within a narrow range; for man, the mean is close to 98.6° F. There is, however, a range of variation for each individual around his own mean. We may label the limits of this normal variation as an upper and a lower threshold. Should environmental variations cause an increase in body temperature which exceeds the upper threshold, certain restorative processes are triggered. First are certain changes mediated by the autonomic nervous system. The peripheral blood vessels relax, allowing more heat to be lost to the air; and the sweat glands excrete moisture, further cooling the skin. Finally, the normal temperature is restored and the mechanism shuts off.

If homeostasis amounted to no more than this, it would have no interest to psychologists. We become intrigued, however, when we learn that persistence of heightened body temperature activates a new set of mechanisms. These include hormonal effects to reduce heat production by metabolism (e.g., pituitary thyrotropin diminishes, slowing thyroid hormone production) and other bodily changes. If the temperature still persists beyond the upper threshold, the animal moves restlessly about until a cooler environment is located.

I have represented these relationships in Figure 2 by a succession of thresholds. If the internal body temperature rises above the threshold value labeled A, one mechanism is activated; should it continue to rise, exceeding value B, another mechanism or set of processes comes into action; and should it exceed value C, a third or voluntary homeostatic response is triggered. (I assume it is clear that I am not postulating three such thresholds for every state but only developing the notion of a succession or hierarchy of threshold values.) I also am assuming that the successive mechanisms may be triggered by a time threshold as well as by an absolute temperature threshold.

This analysis enables us to clarify certain issues and to deal with certain critics of homeostatic theory. In a recent article Maze (24) made the very good point that the concept of homeostasis should not be

treated as a disembodied force. However, he also proposed that homeostasis should be restricted to those instances in which a *specific* physiological structure mediated a *specific* process of restoring a *specific* steady state. To do otherwise, he argued, was mystical. But it is apparent even from the examination of this simple instance of temperature control that we must not limit ourselves to a specific physiological structure nor to a

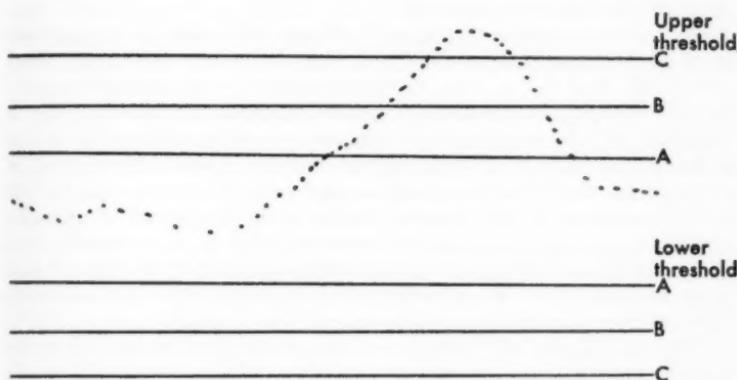


Fig. 2. Multiple thresholds for corrective actions to restore essential steady state.

specific response process. In the first place, the persisting disturbance of equilibrium can activate successive levels of neural integration. While we are not sure as to the exact nuclei involved in some of these regulatory processes, it is certain that failure to achieve equilibrium by a simple reflex mechanism leads to activation of centers controlling more widespread response systems. Secondly, failure of these second-line restorative mechanisms is followed by activation of skeletal muscles and "voluntary" movements. Unless we wish to ignore completely the spread of reflex response from the first simple mechanisms to the more complex systems and the ultimate involvement of the voluntary system, we cannot accept Maze's limitation of a specific structure or a specific process. The continuity of a homeostatic mechanism must be defined in terms of the continuity of the disequilibrium, not in terms of a specific nerve nucleus or response mechanism (32). The construct, then, must be molar rather than molecular. Potentially, if not in every instance, it involves the total organism.

I would therefore propose a reduction sentence for a homeostatic mechanism as follows: If a bodily steady state is disturbed by more than a determinable threshold value, then a homeostatic mechanism is

activated *if, and only if*, persistence of the disturbance leads to involvement of additional response systems.

I am sure that my purpose here is clear. The definition proposed draws a clear-cut distinction between simple reflexes and complex motivational phenomena. If the organism had no resources, other than the vascular mechanism, for dealing with heightened temperature and similar deviations, homeostasis would still be a useful concept for physiologists, but it would have little bearing on psychology.

The diagram shown in Figure 2 offers another clue to an important point about homeostatic action. It is necessary to postulate that every disturbance of a steady state is communicated to some control center. I have no desire to get off into neurological speculation. What I do wish to suggest is that this concept of an information input, be it through receptors as we usually understand them or be it through direct biochemical influence upon the anterior pituitary or upon nerve centers, provides a link to Hull's concept of drive stimuli. Clearly, in the example of temperature, a heightened temperature can be conceived of as a drive stimulus in a rather direct sense. Even a lowered temperature can be thought of as a drive stimulus, since we phenomenally experience cold as qualitatively different from heat.

Suppose, on the other hand, we consider a steady state such as the sodium-potassium balance, the oxygen-carbon dioxide equilibrium, or the concentration of vitamin B. These are normally "silent" disturbances since they do not give rise to consciously experienced disequilibrium. On the other hand, it is well established that these and other similar disturbances can function as motives for experimental laboratory situations and probably also have motivational significance in daily life. The concept of a control center, therefore, which is sensitive to threshold changes in these steady states and which exerts dynamogenic effects on response mechanisms, seems to be necessary. The problems which arise from identifying drive with drive stimuli can thereby be avoided. With Morgan (25), I propose to refer to the drive state by the initials "c.m.s.," meaning a central motive state. The c.m.s. is not the same as the inflow of afferent impulses from stomach, viscera or vascular mechanisms, although it is related in an orderly fashion to these afferent impulses.²

This amounts to little more than the familiar observation that the conscious threshold for stimulation is considerably higher than the absolute

² The question has been raised: Can we measure the "level of arousal" of the c.m.s.? My answer is in line with that given by Ritchie (28); c.m.s. is a hypothetical construct which is inferred from certain inputs and certain outputs of the organism. "Level of arousal" may then be correlated with the nature of the external situation and with bodily responses, fantasies, interference with ongoing patterns, etc. If it be argued that this is circular logic, I would note that a reinforcer is defined as an event which reinforces; in other words, circular definitions may be useful even if not logically elegant.

threshold or the threshold under special instructions. The drive state is not always or even necessarily conscious; Freud has taught us that many dynamic processes are not. The concept of multiple thresholds is a familiar one which seems to bring order into this particular chaotic situation.

Obviously these thresholds may vary substantially for different steady states and different kinds of input. It is perfectly possible that some "needs" will prove fatal to the organism before they activate the central drive state. The danger from nuclear fall-out is a case in point; man lacks an information mechanism for warning him of such threats, and he seems to lack the intelligence to take precautionary measures in the absence of such physical stimulation.

Maslow (23) has stressed a similar notion with his concept of basic needs. He argues that these are innately determined, but some are—he alleges—so weak that they may never dominate the response mechanism. If the person is constantly busy just satisfying survival needs, his wish for affection or for sensory experience may never attain expression. These needs are silent, and the person is not aware of lacking anything essential; yet, his personality may show damage from this frustration.

I am not prepared to argue about the nature of the information input which activates the c.m.s. in the case of these silent steady states. I only want to emphasize the importance of building our motivational theory around the central concept of arousal, rather than around the peripheral concept of drive stimuli.

RESTATEMENT OF THE PROBLEM

A number of psychologists have preceded me in proposing that we combine homeostatic theory and drive theory. Seward says, "by *drive* I mean an excitatory state produced by a homeostatic disturbance" (29, p. 195). And Bindra (6) repeatedly refers to drive stimuli as impulses arising from homeostatic imbalances. It should be easy to reach agreement that the need-reduction theory and homeostatic theory are, at least in some areas, verbal equivalents. Can we combine them in such a way as to cover the whole field of motivation?

Figure 3 represents diagrammatically the common usage of need reduction, homeostasis, and motivation. Homeostasis is frequently used to include the very simple biochemical phenomena such as buffering, to which I have already referred. We are not sure that these phenomena have any motivational significance, and so I have represented them as not overlapping either need reduction or motivation. Then we have a broad range of phenomena which are commonly labeled need-reducing, or homeostatic, or motivating, more or less indifferently. These phenomena would include hunger, thirst, pain, and similar events.

It is the phenomena at the right-hand end of the diagram which cause us the most difficulty. Among these are behavior (3) based on sex, affective

preference, exploratory need, manipulative need, and the complex goal-seeking behavior associated with personality and clinical studies. Can homeostatic theory handle these, and if so, how?

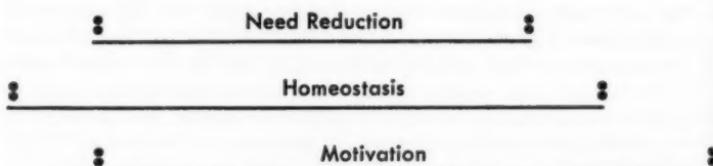


Fig. 3. Overlapping phenomena commonly labeled need reduction, homeostasis, and motivation.

I assume that I need not spend much time on the fact that these behaviors cause excruciating difficulties for a need-reduction theory. Hebb (18) has done a thorough job of demolishing the notion that sex drive can be treated as need reduction. Harlow (16) has done equally well in demonstrating the motivational effects of sensory exploration and manipulation of the environment. The problems of dealing with ambitions and aspirations, religious values and political ideologies, are familiar to us all.

I have adopted a kind of compromise position in the diagram and shown homeostasis as embracing most but not all of motivation. Actually, I intend to argue that it can be extended to cover the entire range of motivational process, but the diagram represents common usage rather than my own picture of the situation.

Before facing the problems of the behaviors to be assigned to the right-hand end of the diagram, let me note why I prefer homeostatic theory as the way of conceptualizing the center of this range of observations. I have already identified the two major considerations involved: inclusiveness and parsimony.

Homeostasis is particularly well adapted to include a variety of phenomena. It applies to events ranging from the acid-base balance in the blood to phenomena of food-seeking behavior, house-building, air conditioning, and so on (31). As to parsimony, I think it is clear that we need to make several assumptions, but I believe all of these are essential likewise to need reductionists: (a) homeostatic imbalance gives rise to information input, which may be hormonal or neural; (b) a central control mechanism receives this information and is activated thereby; (c) this mechanism has multiple thresholds, triggering successively more extensive response mechanisms; (d) behavior shows the attribute we call motivated, so long as this mechanism is activated.

The main difference between my view and both drive theory and earlier homeostatic theory, therefore, is my emphasis on a central moti-

vating mechanism. This is the common center to which all kinds of needs, hunger, thirst, etc., and all kinds of disturbances which do not meet the definition of need, such as sex, sensory deprivation, and the like, are connected. Informational inputs, neural or hormonal, activate this center. The center's activity energizes behavior and modifies perception (19).

As already noted, this concept is borrowed from Morgan (25) who labeled it c.m.s. It seems to me that we are forced to postulate some such mechanism in order to face up to the data. Various other authors have accepted the c.m.s. concept in one form or another. Brown (7) and Farber (15), for example, seem to have abandoned drive stimuli in favor of a central state as the essential mechanism of energizing and reinforcing behavior. Seward (29) throws out rather casually the notion of a *non-specific goal tension* as an intervening construct between the stimulus and motivated behavior. This seems equivalent to Morgan's c.m.s. Hebb, of course, endorses the idea of a central motive state, and a similar view is expressed by Murphy (26). "Motives," he writes, "are assigned to regions of high tension, or unstable equilibrium, inside the body." He feels, however, that it is not feasible to select certain organ systems and identify these as the sources of motivation. "All tissues are rather unstable," he comments. "All points in the body are at all times the site of chemical reaction, of energy changes, that pass, gradient-wise, in many directions. The nervous system is no mere connection system; it is itself the site of many tensions" (26, p. 88).

The necessity of assuming a c.m.s., instead of stressing the feedback from peripheral states as the essence of drive, may be supported by a number of lines of evidence. Berkun, Kessen, and Miller (4) fed animals through a stomach fistula, or conversely, allowed sham feeding which did not get food into the stomach. Greater reinforcing effects were obtained by the latter procedure than by inserting food into the stomach. Clearly, neither the ending of a need state nor the restoration of glucose balance in the bloodstream is occurring here. I suggest that the c.m.s. is aroused by the homeostatic disturbance but is reduced by feedback from the consummatory response (eating), not by the restoration of glucose equilibrium (27). (In the long run, of course, equilibrium restoration is essential to prevent rapid rearousal.)

Similarly, Adolph (1) demonstrated that dogs will drink an amount approximately equal to that required to restore the water balance, even though the water is not reaching the animal's stomach. Here again it appears that the control—of satiation at least—depends on feedback from the consummatory response canceling some central state of activation.

Evidence critical of the need-reduction view, but compatible with the view outlined above, is that of Sheffield, Wulff, and Backer (30), who found that the sex drive could be used to motivate and reinforce behavior in male rats; the animals were simply allowed to mount receptive females but not to reach orgasm. In such cases, it would seem that an increase in

drive stimuli would result, but reinforcement was nevertheless demonstrated. I would argue that some stimuli are innately capable of disrupting a central equilibrium—just as pain can—and that this activates the c.m.s. Certainly we all know that the appearance of an attractive sex object can disturb equilibrium and energize behavior. In the case of the Sheffield example, and the observations reported by Young (36), I would argue that "attractive" or "palatable" stimuli can alternatively *activate* and *reduce* the c.m.s. irrespective of any need-reducing function (27). Appearance of the attractive object arouses tension; contact with it reduces the c.m.s. Whether all of these stimuli have innate connections to the central arousal mechanism or whether some prior learning is necessary, I do not pretend to know. Harlow's work on infant monkeys (17) suggests that some kinds of information input have an innate value in reducing motivational arousal.

How can we deal with the phenomena of exploratory drive, manipulatory drive, etc., which have been pointed out as obstacles to either a need-reduction or a homeostatic theory? Need reductionists can, of course, postulate an innate need for stimulation, but this gets into difficulties, especially with the fact that high intensity stimuli have negative rather than positive incentive value. On the other hand, it is clear from the work of Bexton, Heron, and Scott (5) on sensory deprivation that a sharp reduction in the normal level of exteroceptive stimulation has decided arousal value. To handle this question I would have recourse to the concept of optimal level of stimulation, as suggested by Hebb (18) and formally stated by Leuba (22). I suggest that such a central equilibrium can function in the same way as other steady states, and that disturbance of this level can activate the c.m.s.

A relevant consideration is Helson's concept of *adaptation level* (20), but in the context of motivation rather than perception (although the arbitrary boundary between these two ought to be erased). Infants vary at birth in the amount of stimulation they seem to prefer, and there is substantial evidence (11) that the kind of mothering they get may determine the preferred level in later childhood. It seems entirely plausible that a deviation from this level of stimulation, either toward sensory deprivation or toward intense afferent arousal, may activate the c.m.s. In this case, satiation, or drive reduction, is accomplished purely and simply by restoration of the preferred level of stimulation.

It is further appropriate to consider here the phenomenon of stimulus expectancy and the extent to which equilibrium is disturbed simply by the failure of an expected event to occur. Seward (29) has proposed the term *tertiary drive*, which seems to mean only that an act set in motion has a tendency toward completion. Blockage of the act induces arousal. (Compare Lewin's concept of the effect of barriers on valence and tension.) Seward's tertiary drive does not seem to be an appropriate term, but it is clear that blockage of an anticipated act or stimulus has arousal value.

It appears, then, that an equilibrium concept is more useful here than a need concept.

Let us move from this to another kind of behavior which has often been presented as negating the homeostatic conception of motivation. Allport (2) is fond of citing the explorer who leaves his home and family, physical comforts and devices for protecting his body equilibria, to enter conditions of pain, discomfort, and possible death. I would reply that the explorer's equilibrium is disturbed by sitting around home, that this situation is discrepant with his self-image, and that he can restore equilibrium only by engaging in the activity he perceives as appropriate to himself. In a sense this is an extension of the adaptation-level argument; presumably the explorer has built up, over a period of time, the percept of himself as the kind of person who goes adventuring. Failure to act in this manner is disturbing, just as the retired businessman is upset by being cut off from his accustomed activities.

Let us consider briefly another facet of the explorer problem. Allport asks how the proponent of homeostatic theory can explain an action which threatens acute disruption of many important steady states. The answer to this, of course, is that almost every action threatens to disrupt some equilibrium. Davis (12) has coined the term *heterostasis* to refer to the fact that any homeostatic action may disrupt some other stable function. Consider the temperature problem; perspiring may disrupt the water balance or the salt balance. Homeostatic action to keep body temperature down sets off a thirst drive.

Heterostasis implies that the body has a hierarchy of steady states, and that those in the upper ranges are preserved even at the cost of disruption of one or more in the lower levels. Such a concept is of course essential to any theory of motivation, holistic or molecular. Maslow (23) has propounded the notion of a hierarchy of needs, one of which dominates behavior until it is satisfied, after which the one next in the hierarchy takes over. Maslow does not suggest by what mechanism this is accomplished. The concept of a hierarchy of thresholds capable of triggering a central arousal mechanism seems to be one workable approach to this problem.

It seems reasonably certain that one kind of hierarchy of steady states is built into the organism, i.e., hereditary. Warden (33) used an indirect method of demonstrating such a hierarchy with his obstruction box. The choice technique, as used in Young's preference studies (36) or in those pitting hunger against thirst, gets more directly at relative standing in the hierarchy. I conceive of this mechanism as being basically like the principle of the final common path, namely, that there is a gating mechanism which permits one and only one activating mechanism to function at a given moment. According to this view, the steady state, disturbance of which elicited the most intense c.m.s., would dominate the final common

path, and action would be undertaken to reduce this c.m.s. In accordance with the notion of heterostasis, we would expect that steady states lower in the hierarchy might be disturbed; as soon as the dominant one has been reduced, the one next in the series takes over and controls behavior.

White (34) has objected to this kind of description of behavior as moving through a series of "episodes of homeostatic crisis." While registering disapproval of the word crisis, which implies a higher peak of motivational arousal than is common, I would argue that ordinary behavior is characterized precisely by serial episodes of homeostatic adaptation. White, of course, was criticizing the notion that all behavior is based on biogenic drives—hunger, thirst, pain, and sex; he might find less fault with the more flexible concept I have built around the term homeostasis.

The importance of a hierarchy of steady states can be illustrated by reference to an article by Brown (8). Brown's favorite illustration is that of a man learning to drink straight whiskey. He argues that, because ingestion of alcohol is regularly followed by reduction of various drives, there is no contradiction for drive-reduction theory in this situation. Yet he admits that "straight whiskey, when first ingested, typically elicits rather violent defense reactions" (8, p. 173). Since the drive reduction to which he refers may occur late in the training series, not on the first or even the fifth occurrence of such drinking, it is hard to see how this is plausible. Brown has not asked what motive impels the drinking in the first few trials. A little observation would have indicated that *other* energizing stimuli, for example, questions about the masculinity of the novice, are involved here.

It is not sufficient, in other words, to rely upon a hierarchy of established responses and upon the notion that a high dominance response, once activated, will persist in the face of aversive stimuli. How did this response attain its dominant status? What kind of reinforcement operates to maintain responses in the face of nausea and hangovers? We know observationally that for most men masculinity is a major goal and that implied lack of masculinity is a major disturbance to equilibrium. This, it seems to me, makes much better sense than holding that the person will somehow keep drinking until he learns that alcohol provides favorable as well as disturbing consequences.

Before closing, I would like to note that the concept of the c.m.s. seems to me useful in dealing with personality and clinical phenomena such as substitute gratification. If each biological drive had its own unique tension, we could hardly explain such cases as eating to relieve anxiety (or to fulfill a need for affection), or sexual behavior motivated by security needs. The postulation of a c.m.s. which is a common intervening construct for all motives makes such behavior easier to explain. Consummatory responses appropriate to reduction of c.m.s. in one context may have temporary value in cases of arousal on some other basis. I would stress the word

"temporary" here because, if the basic equilibrium is not restored, rearousal will occur shortly. This is precisely what happens, according to the clinicians. Because the substitute activity does not restore the highest ranking steady state, restless, seeking behavior recurs within a brief interval after the reduction of tension.

SUMMARY

Let me briefly summarize the point of view which has been developed by the foregoing arguments. First, the terms homeostasis, need reduction, and motivation have in common a reference to the energizing and maintenance of behavior. Need reduction has been widely accepted as providing a useful conceptualization for dealing with the phenomena of motivation, but it has also encountered severe criticism. Second, homeostasis has been proposed by some authors as an alternative to need reduction, but in its early forms it has been subject to many of the same criticisms as need reduction. My intent, therefore, has been to offer a reformulation of homeostatic theory which seeks simultaneously to incorporate need reduction as a special case and to evade some of the criticisms affecting both ways of viewing motivation.

The essential points in the reformulation are as follows: (a) Homeostasis is not a force, but is a general term identifying the fact that most—perhaps all—motivational phenomena possess in common the attributes of disturbance and restoration of equilibrium. (b) The concept of steady state is extended to include not only the familiar phenomena of the internal biochemical states (temperature, water balance, and glucose balance) but also preferred levels of stimulation, adaptation level, and other perceptual phenomena such as expectancy. (c) Disturbance of any steady state results in an information input to a central mechanism. This input may be neural or hormonal. Multiple thresholds regulate the energizing effects of the disturbance. (d) Activation of the central mechanism is conceived as a central motive state; as long as this state persists, the organism is in a condition of heightened activity. While there is an orderly relationship between the information input, or drive stimuli, and the c.m.s., the two must not be identified. It is likely that certain stimuli, such as pain and sexual objects, disrupt the central equilibrium and activate c.m.s. Persistence of c.m.s. corresponds to the maintenance of a high degree of arousal, *regardless* of the level of stimulation; and a reduction of c.m.s. corresponds to what is variously called satiation or reinforcement, *regardless* of the level of stimulation. Originally, c.m.s. is reduced by restoration of the steady state, but after learning, stimuli associated with such restoration will reduce the c.m.s. prior to actual need reduction. (e) Action to restore one steady state may require disturbance of other steady states of lower hierarchical value; in other words, there exists a hierarchy of steady states. The term heterostasis refers to the fact that a high level equilibrium

will be protected or restored at the cost of disturbing lower level balances. These will be restored in turn, dominance of the response mechanism being determined by hierarchical value.

Motivation is firmly rooted in biological attributes of the organism, but it cannot be identified with peripheral mechanisms. Homeostasis is characterized by involvement of the total organism. The concept of need is treated as a subclass of the category of steady states, and the concept of drive stimuli is treated as a matter of information about disturbances of steady states. The nuclear concept is that of central motive state. By avoiding the peripheral emphasis of earlier need-reduction and homeostatic theorizing, the reformulation is brought closer to the facts of the laboratory and of the clinic.

In this framework, the tasks of empirical research can be stated clearly. What are the steady states, disturbance of which can lead to arousal of the c.m.s.? What is the hierarchical arrangement of these states? What external stimuli and what internal processes disturb given states? What are the modes of information input in each case? What are the most useful indices of the extent of c.m.s. arousal? What are the external and internal conditions reducing c.m.s.?

The foregoing questions are phrased in general terms. But it is obvious that differences in human personalities are related to differences in these variables. People vary in the specific steady states they protect; they vary in the extent of disturbance they can tolerate; they vary in the intensity of arousal; they vary in the kinds of stimuli which lead to satiation, gratification, or reinforcement.

Motivation is the most difficult, and the most important, area in psychological theorizing today. I have tried to present a way of thinking about the key problems of motivation in a fashion that may lead to more satisfactory solutions than those now available. At the very least I hope that I have disturbed the equilibrium of anyone who is satisfied with the present situation and motivated him to re-examine the problem.

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